SCX-5312F/5112

SAMSUNG

SAMSUNG LASER MFP
User's Guide

User's Guide

SAMSUNG DIGIT*all*
e v e r y o n e ' s   i n v i t e d ™

Digital Laser MFP

SCX-5312F
SCX-5112

Home Visit us at:
www.samsungelectronics.com/mfp

P/N: JC68-00851A Rev. 2.00

CONTENTS

Important Precautions and Safety Information

When using this product, these basic safety precautions should always be followed to reduce risk of fire, electric shock, and injury to persons:

1. Read and understand all instructions.

2. Use common sense whenever operating electrical appliances.

3. Follow all warnings and instructions marked on the product and in the literature accompanying the product.

4. If an operating instruction appears to conflict with safety information, heed the safety information. You may have misunderstood the operating instruction. If you cannot resolve the conflict, contact your sales or service representative for assistance.

5. Unplug the product from the AC wall socket and/or telephone jack before cleaning. Do not use liquid or aerosol cleaners. Use only a damp cloth for cleaning.

6. Do not place the product on an unstable cart, stand, or table. It may fall, causing serious damage.

7. Your product should never be placed on, near, or over a radiator, heater, air conditioner, or ventilation duct.

8. Do not allow anything to rest on the power. Do not locate your product where the cords will be abused by persons walking on them.

9. Do not overload wall outlets and extension cords. This can diminish performance, and may result in the risk of fire or electric shock.

10. Do not allow pets to chew on the AC power, telephone, or PC interface cords.

11. Never push objects of any kind into the product through case or cabinet openings. They may touch dangerous voltage points, creating a risk of fire or shock. Never spill liquid of any kind onto or into the product.

12. You product may have a heavy cover for optimal pressure on the document for the best scanning and/or faxing (usually the flatbed-type product). In this case, replace the cover after placing document on the scan glass, by holding and moving it down slowly until it seats on its location.

13. To reduce the risk of electric shock, do not disassemble the product. Take it to a qualified service technician when repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly could cause electric shock when the unit is subsequently used.

14. Unplug the product from the telephone jack, PC and AC wall outlet, and refer servicing to qualified service personnel under the following conditions:

- When any part of the power cord, plug, or connecting cable is damaged or frayed.

- If liquid has been spilled into the product.

- If the product has been exposed to rain or water.

- If the product does not operate properly after instructions have been followed.

- If the product has been dropped, or the cabinet appears damaged.

- If the product exhibits a sudden and distinct change in performance.

15. Adjust only those controls covered by the operating instructions. Improper adjustment of other controls may result in damage, and may require extensive work by a qualified service technician to restore the product to normal operation.

16. Avoid using this product during a lightning storm. There may be a remote risk of electric shock from lightning. If possible, unplug the AC power and telephone cord for the duration of the lightning storm.

17. SAVE THESE INSTRUCTIONS.

Laser Safety Statement

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR, chapter 1 Subchapter J for Class I(1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 825.

Class I laser products are not considered to be hazardous. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.

WARNING

Never operate or service the printer with the protective cover removed from Laser/ Scanner assembly. The reflected beam, although invisible, can damage your eyes.

CAUTION - INVISIBLE LASER RADIATION WHEN THIS COVER OPEN.
DO NOT OPEN THIS COVER.

VORSICHT - UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.

ATTENTION - RAYONNEMENT LASER INVISIBLE EN CAS D'OUVERTURE.EXPOSITION DAN GEREUSE AU FAISCEAU.

ATTENZIONE -RADIAZIONE LASER INVISIBILE IN CASO DI APERTURA. EVITARE L'ESPOSIZIONE AL FASCIO.

PRECAUCION -RADIACION LASER IVISIBLE CUANDO SE ABRE. EVITAR EXPONERSE AL RAYO.

ADVARSEL - USYNLIG LASERSTRÅLNING VED ÅBNING NÅR SIKKERHEDSBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLNING.

ADVARSEL - USYNLIG LASERSTRÅLNING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN. UNNGÅ EKSPONERING FOR STRÅLEN.

VARNING - OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPAND OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN. STRÅLEN ÄR FARLIG.

VARO! - AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE ÄLÄ KATSO SÄTEESEEN.

Ozone Safety

During normal operation, this product produces ozone. The ozone produced does not present a hazard to the operator. However, it is advisable that the product be operated in a well ventilated area.

If you need additional information about ozone, please request your nearest Samsung dealer.

Power Saver

This product contains advanced energy conservation technology that reduces power consumption when it is not in active use.

When the product does not receive data for an extended period of time, power consumption is automatically lowered.

The energy star emblem does not represent EPA endorsement of any product or service.

Radio Frequency Emissions

FCC Information to the User

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canadian Radio Interference Regulations

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Industry and Science Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", ICES-003 édictée par l'Industrie et Sciences Canada.

Fax Branding

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone facsimile machine unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission the following information:

(1) the date and time of transmission

(2) identification of either business, business entity or individual sending the message; and

(3) telephone number of either the sending machine, business, business entity or individual.

Refer to the Facsimile User's Guide for instructions on how to enter this information into your product's memory.

The Telephone Company may make changes in its communications facilities, equipment operations, or procedures where such action is reasonably required in the operation of its business and is not inconsistent with the rules and regulations in FCC Part 68. If such changes can be reasonably expected to render any customer terminal equipment incompatible with telephone company communications facilities, or require modification or alteration of such terminal equipment, or otherwise materially affect its use or performance, the customer shall be given adequate notice in writing, to allow the customer an opportunity to maintain uninterrupted service.

Ringer Equivalence Number

The Ringer Equivalence Number and FCC Registration Number for this product may be found on the label located on the bottom or rear of the product. In some instances you may need to provide these numbers to the telephone company.

The Ringer Equivalence Number (REN) is a measure of the electrical load placed on the telephone line, and is useful for determining whether you have "overloaded" the line. Installing several types of equipment on the same telephone line may result in problems making and receiving telephone calls, especially ringing when your line is called. The sum of all Ringer Equivalence Numbers of the equipment on your telephone line should be less than five in order to assure proper service from the telephone company. In some cases, a sum of five may not be usable on your line. If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network.

WARNING:

FCC Regulations state that changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment. In the event that terminal equipment causes harm to the telephone network, the telephone company should notify the customer that service may be stopped. However, where prior notice is impractical, the company may temporarily cease service, providing that they:

a) Promptly notify the customer.

b) Give the customer an opportunity to correct the equipment problem.

c) Inform the customer of the right to bring a complaint to the Federal Communication Commission pursuant to procedures set out in FCC Rules and Regulations Subpart E of Part 68.

You should also know that:

• Your product is not designed to be connected to a digital PBX system.

• If you intend to use a computer modem or fax modem on the same phone line as your product, you may experience transmission and reception problems with all the equipment. It is recommended that no other equipment, except for a regular telephone, share the line with your product.

• If your area experiences a high incidence of lightning or power surges, we recommend that you install surge protectors for both the power and the telephone lines. Surge protectors can be purchased from your dealer or telephone and electronic specialty stores.

• When programming emergency numbers and/or making test calls to emergency numbers, use a non-emergency number to advise the emergency service dispatcher of your intentions. The dispatcher will give you further instructions on how to actually test the emergency number.

• This product may not be used on coin service or party lines.

• This product provides magnetic coupling to hearing aids.

• You may safely connect this equipment to the telephone network by means of a standard modular jack, USOC RJ-11C.

Declaration of Conformity (European Countries)

Approvals and Certifications

The CE marking applied to this product symbolises Samsung Electronics Co., Ltd. Declaration of Conformity with the following applicable 93/68/EEC Directives of the European Union as of the dates indicated:

January 1, 1995: Council Directive 73/23/EEC Approximation of the laws of the member states related to low voltage equipment.

January 1, 1996: Council Directive 89/336/EEC (92/31/EEC), approximation of the laws of the Member States related to electromagnetic compatibility.

March 9, 1999: Council Directive 1999/5/EC on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

A full declaration, defining the relevant Directives and referenced standards can be obtained from your Samsung Electronics Co., Ltd. representative.

EC Certification

Certification to 1999/5/EC Radio Equipment & Telecommunications Terminal Equipment Directive (FAX)

This Samsung product has been self-certified by Samsung for pan-European single terminal connection to the analogue public switched telephone network (PSTN) in accordance with Directive 1999/5/EC. The product has been designed to work with the national PSTNs and compatible PBXs of the European countries:

In the event of problems, you should contact the Euro QA Lab of Samsung Electronics Co., Ltd. in the first instance.

The product has been tested against TBR21. To assist in the use and application of terminal equipment which complies with this standard, the European Telecommunication Standards Institute (ETSI) has issued an advisory document (EG 201 121) which contains notes and additional requirements to ensure network compatibility of TBR21 terminals. The product has been designed against, and is fully compliant with, all of the relevant advisory notes contained in this document.

Replacing the Fitted Plug (for UK Only)

IMPORTANT

The mains lead for this machine is fitted with a standard (BS 1363) 13 amp plug and has a 13 amp fuse. When you change or examine the fuse, you must re-fit the correct 13 amp fuse. You then need to replace the fuse cover. If you have lost the fuse cover, do not use the plug until you have another fuse cover.

Please contact the people from you purchased the machine.

The 13 amp plug is the most widely used type in the UK and should be suitable. However, some buildings (mainly old ones) do not have normal 13 amp plug sockets. You need to buy a suitable plug adaptor. Do not remove the moulded plug.

WARNING

**If you cut off the moulded plug, get rid of it straight away.
You cannot rewire the plug and you may receive an electric shock if you plug it into a socket.**

IMPORTANT WARNING: You must earth this machine.

The wires in the mains lead have the following colour code:

• Green and Yellow: Earth

• Blue: Neutral

• Brown: Live

If the wires in the mains lead do not match the colours marked in your plug, do the following:

You must connect the green and yellow wire to the pin marked by the letter `E', or by the safety `Earth symbol' or coloured green and yellow or green.

You must connect the blue wire to the pin which is marked with the letter `N' or coloured black.

You must connect the brown wire to the pin which is marked with the letter `L' or coloured red.

You must have a 13 amp fuse in the plug, adaptor, or at the distribution board.

SAMSUNG ELECTRONICS

EU Declaration of Conformity (R&TTE)

We, Samsung Electronics Co., Ltd.

1. Samsung Electronics Co.,Ltd.
#259, Gongdan-dong, Gumi-City, Gyung-Buk, KOREA. 730-030
(factory name, address)

declare under our sole responsibility that the product

Laser Multi Function Product

" SCX-5312F/ SCX-5112/ SCX-5212A"

to which this declarartion relates is in conformity with

R&TTE Directive : 1999/5/EC (Annex ^{II})
Low Voltage Directive : 73/23/EEC
EMC Directive : 89/336/EEC. 92/31/EEC

By application of the following standars
R&TTE : TBR 21, EG 201 121

LVD : EN 60950:1992 +A1+A2+A3+A4+A11/EN 60825-1:1994+A11

EMC : EN 55022:1998/55024:1998/61000-3-2:1995 inc.A1/A2:1998/61000-3-3:1995

AS/NZS3548:1995

(Manufacturer)
Samsung Electronics co.,Ltd
#259,Gongdan-Dong,Gumi-City
Gyung-Buk, Korea 730-030

2001-10-11
....
(place and date of issue)

Yong-Hwan Kim / Senior Manager
(name and signature of authorized person)

(Representative in the EU)
Samsung Electronics Euro QA Lab.
Blackbushe Business Park
Saxony Way, Yateley, Hampshire
GU46 6GG, UK

2001-10-15
....
(place and date of issue)

In-Seop Lee / Manager
(name and signature of authorized person)

1 GETTING STARTED

Thank you for purchasing Samsung multifunctional product. This product provides printing, copying, scanning, and faxing (SCX-5312F only) functions!

This chapter provides step-by-step instructions on setting up the product, and installing the software.

This chapter includes:

- **Unpacking**

- **Component Location**

- **Control Panel Functions**

- **Making Connections**

- **Installing Drum and Toner Cartridges**

- **Turning the Product On**

- **Loading Paper**

- **Setting the Paper Size**

- **Changing the Display Language**

- **Using Save Mode**

Unpacking

1 Remove the shipping tapes from the front, back, and sides of the prodcut.

Tape
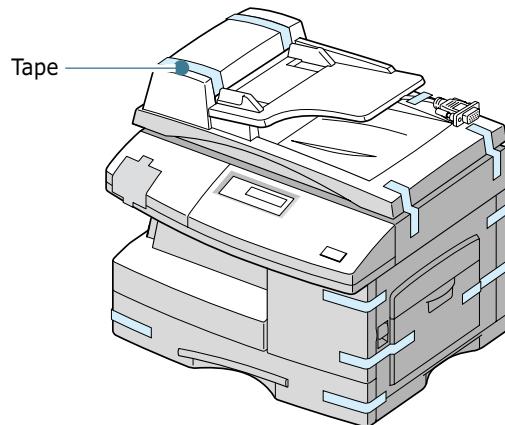
2 Remove the label completely from the scanner module by pulling it straight, and the scan unlock switch automatically moves to the unlock position (🔓).

Scanner
module
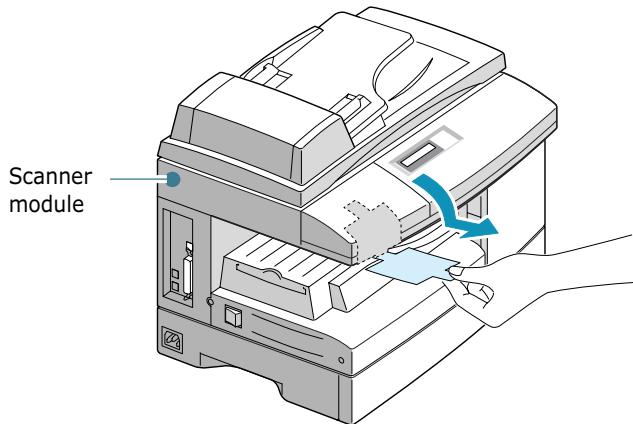
> **NOTE:** To scan or copy a document, the switch must be on that position. When you are moving the product or do not use the it for a long time, pull the switch toward the Lock mark (🔒).

3 Pull open the paper cassette and remove the packing material from the paper cassette.

4 Ensure that you have the following:
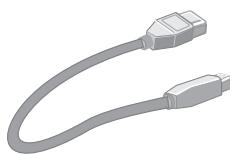
USB Cable
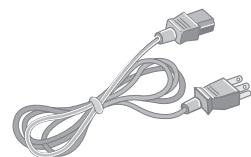
AC Power Cord*

**Telephone Line Cord***
(For SCX-5312F only)
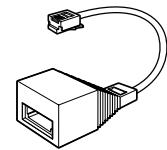
TAM Lead
(For SCX-5312F UK only)
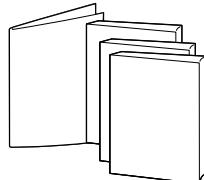
**This User's Guide,
SmarThru User's Guide,
Facsimile User's Guide**
(SCX-5312F only)**,
Quick install Guide**
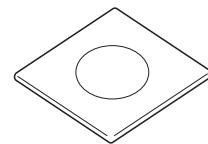
Software CD
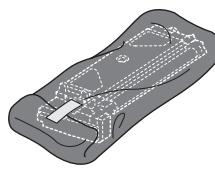
Starter Toner Cartridge
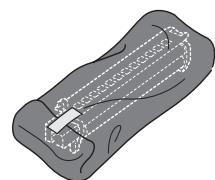
Drum Cartridge

*. The appearance of the power cord and the telephone line cord vary according to countries.

NOTE: You can purchase and install the optional Network Print Server. For details, refer to the documentation supplied with your Network Print Server.

Component Location

Take a moment to familiarise yourself with the main components of your product.

Front View

**Automatic Document Feeder**

Document Guides

Control Panel
(See page 1.6. SCX-5312F. See page 1.9 for SCX-5112.)

Document Input Tray

Document Output Tray

Paper Guides

Bypass Tray

Scanner Module

Paper Cassette

Release lever

Front Cover

Side Cover

Rear View

Document Cover

ADF (Automatic Document Feeder) **Connector**

Document Glass

Telephone Connections
(available in SCX-5312F only)

EXT.

LINE

Paper Cassette

AC Power Cord Connector

Parallel Connector

Power Switch

USB Connector

Paper Exit Extension

Control Panel Functions

SCX-5312F

1	[one-touch buttons panel]	Use to store frequently dialed fax number and dial them with a touch of the buttons. Also use in conjunction with the **Menu/Exit** button to access the corresponding menu functions.
	Shift	Allows you to shift one-touch buttons to the locations 21 through 40.
2 **F A X**	Resolution	Adjusts the resolution of the documents for the current fax job.
	Receive Mode	Use to choose the receive mode. The selected mode is displayed in Standby mode.
	Search/Delete	Use to search for number in memory. Also use to delete digit in the edit mode.
	Speed/Status	Use to store frequently dialed fax number and dial them using the 2-digit speed number. Also use to display alternatively the currently active and pending jobs.
	Redial/Pause	Redials the last number in Standby mode or insert a pause into a fax number in the edit mode.
	Flash/Recall/R	Use to perform a switch-hook operation such as call waiting.

3	(status map)	When an error occurs, the lamp in the corresponding location on the Status map turns on as well as the error indicator, and the error message appears on the display so that you can locate the error. For details on the meaning of the error messages, see page 8.11. ▲ ex) The paper is jammed in the exit area.
	(Error indicators)	Turns on when a paper jam occurs. To clear the jam, see page 8.4.
		Turns on when the toner or drum almost runs out. To replace the toner or drum cartridge, see page 7.3 and page 7.8.
		Turns on when the input tray you are using is empty. To load paper, see page 1.17.
		Turns on when an error occurs on the system.
4		Displays current status and prompts during operation.
5 **C O P Y**	Contrast	Use to adjust the contrast of the documents for the current copy or fax job.
	Image	Use to select the text type for the current copy job or fax job.
	Paper Tray	Use to specify the paper tray you want to use in the Fax or the Copy mode.
	Special Copy	Use to set up special copy features such as AutoFit, Clone, and Collation.
	Duplex Copy	Use to print the current copy job on both sides of paper.
6		Use to dial a number or enter alphanumeric characters.

7 **S A V E**	Toner ◯	Allows you to save toner by using less toner to print a document.
	Power ◯	Allows you to save power by reducing power consumption when not printing.
	Paper ◯	Allows you to save paper by printing 2 pages on a single sheet of paper (available in the Copy mode only).
8	Menu / Exit ◯	Enters the menu functions in conjunction with the one-touch buttons. Also backs you up to the previous menu level or exits the menu.
9[*]	Increase ⌃ ⌄ Decrease	Scrolls though the menu items. When you set the copy size or the copy page number, they can be used to change the number.
	Zoom Set ⟨ ⟩	Scrolls though the option available for the selected menu item. In the Copy mode, < allows you to change the zoom rate and > to change the number of copies.
10	Mode / Enter FAX◂▸COPY ◯	Selects the mode to activate: FAX or COPY. Also, confirms the selection on the display.
11	On Hook Dial ☎	Engages the telephone line.
12	Copy / Start ⬜/◈	Use to start a job.
13	Stop / Clear ◎	Use to stop an operation at any time. Also, use to clear/cancel the copy options such as the zoom rate and multi copy pages in the Copy mode.

* Navigation key

SCX-5112
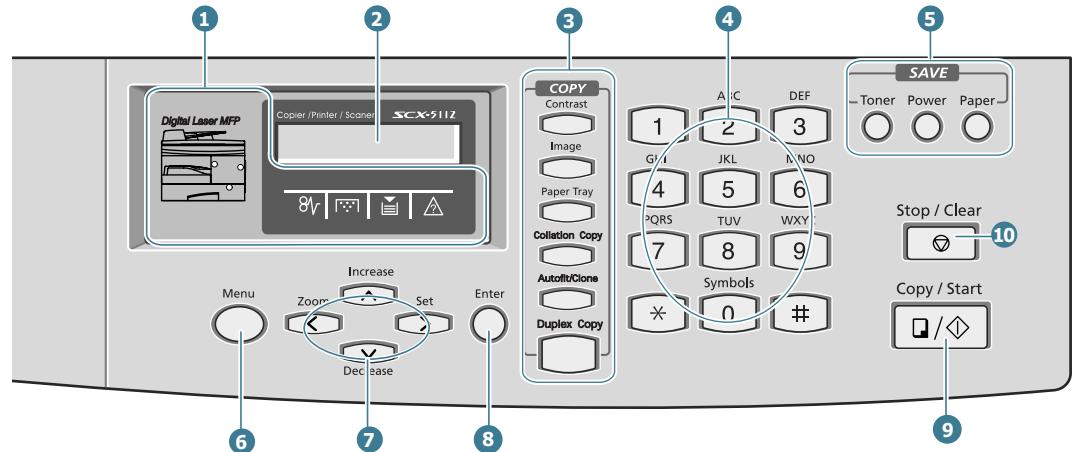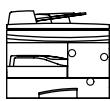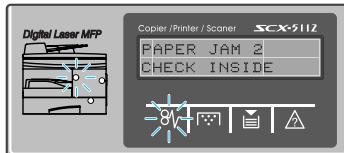
1	 (status map)	When an error occurs, the lamp in the corresponding location on the Status map turns on as well as the error indicator, and the error message appears on the display so that you can locate the error. For details on the meaning of the error messages, see page 8.11. ▲ ex) The paper is jammed in the exit area.
	8∖ ⌷⁞∵⁞⌷ 🗐 ⚠ (Error indicators)	**8∖** Turns on when a paper jam occurs. To clear the jam, see page 8.4.
		⌷⁞∵⁞⌷ Turns on when the toner or drum almost runs out. To replace the toner or drum cartridge, see page 7.3 and page 7.8.
		🗐 Turns on when the input tray you are using is empty. To load paper, see page 1.17.
		⚠ Turns on when an error occurs on the system.
2		Displays current status and prompts during operation.
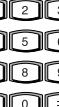
3 **C** **O** **P** **Y**	Contrast		Use to adjust the contrast of the documents for the current copy job.
	Image		Use to select the text type for the current copy job.
	Paper Tray		Use to specify the paper tray you want to use in the Copy mode.
	Collation Copy		Use to collate the copied documents.
	Autofit/Clone		Use to print the original image to fit to the page (Auto Fit) or to print multiple copies on a single page (Clone).
	Duplex Copy		Use to print the current copy job on both sides of paper.
4	1 2 3 4 5 6 7 8 9 * 0 #		Use to enter numbers.
5 **S** **A** **V** **E**	Toner		Allows you to save toner by using less toner to print a document.
	Power		Allows you to save power by reducing power consumption when not printing.
	Paper		Allows you to save paper by printing 2 pages on a single sheet of paper (available in the Copy mode only).
6	Menu		Enters menu mode.
7	Increase / Decrease		Scrolls though the menu items. When you set the copy size or the copy page number, they can be used to change the number.
	Zoom / Set		Scrolls though the option available for the selected menu item. The < button allows you to change the zoom rate and the > button to change the number of copies.
8	Enter		Confirms the selection on the display.
9	Copy / Start		Use to start a job.
10	Stop / Clear		Use to stop an operation at any time. Also, use to clear/cancel the copy options such as the zoom rate and multi copy pages in the Copy mode.

Making Connections

1 Connect the ADF(Automatic Document Feeder) cord to this port and fasten the side screws.
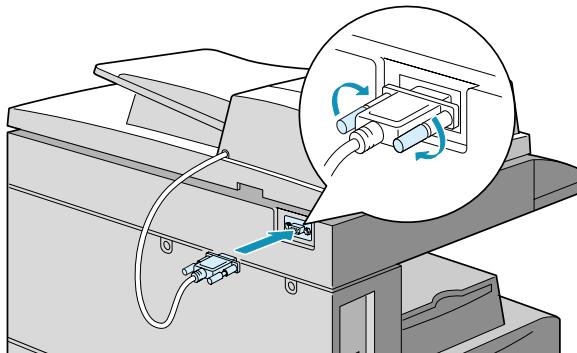
NOTE: Without connecting the cord to the port, you cannot use the ADF.

2 **If you have SCX-5112:**

Skip this step and proceed to step 3.

If you have SCX-5312F:

Connect the supplied telephone line to the **LINE** jack and the other end to the wall jack.
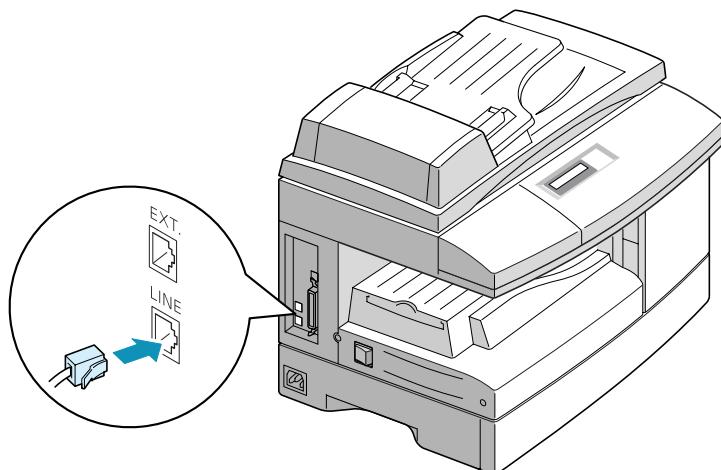
If you want to use your product for receiving both faxes and voice calls, you will need to connect a telephone and/or answering machine to your product.

Plug the cord of your extension phone or answering machine into the **EXT** jack.
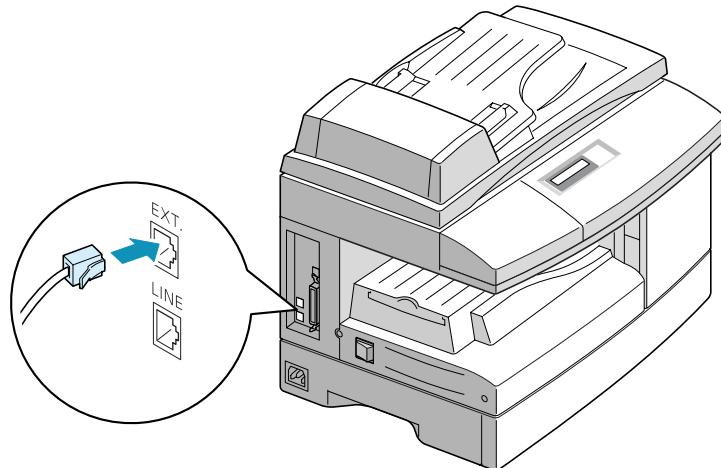
UK users should plug the cord of the extension phone into the supplied TAM lead and plug the cord of the TAM lead into the **EXT** jack on the back of your product.

TAM lead
(For UK users only)
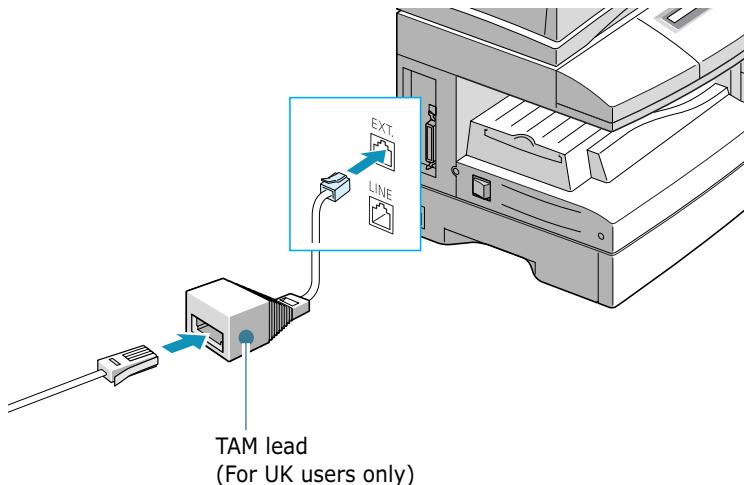
NOTES:
- For UK users, it is strongly recommended to use the TAM lead and the telephone line cord supplied with your product.
- If you are replacing the line cord with other manufacturer's, it should be AWG #26 or lower guage.

3 Connect the USB cable which came with your product.
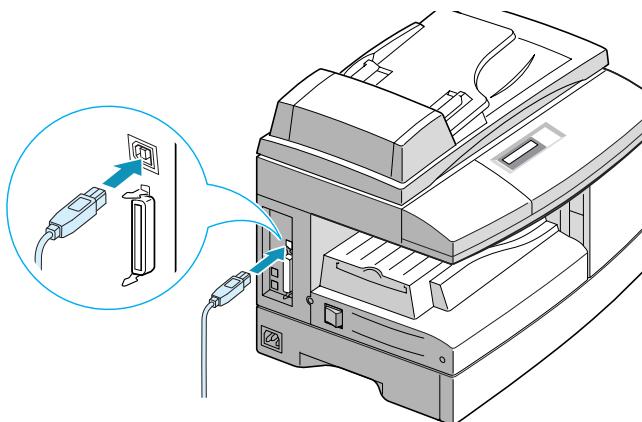
If you want to use a parallel printer cable, purchase only IEEE-1284 compliant parallel cable and connect it to the parallel connector on your product.
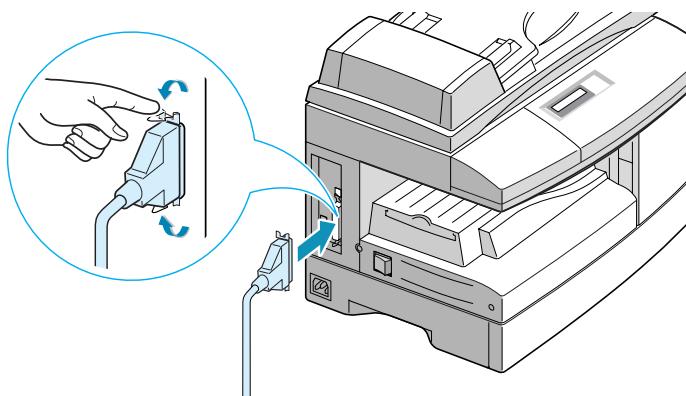
NOTE:

- To connect the printer to the parallel port of the computer requires a certified parallel cable.
  You will need to buy the IEEE1284 compliant cable.

- You only need to connect one of the above cables.

- If you are using a USB cable, you must be running Windows 98/Me/2000/XP.

- When using USB connection, your product provides two USB modes: Fast and Slow. Fast is the default mode. Some PC user may experience poor USB implementation in the default mode. If this occurs, select Slow mode to achieve successful results. For details on changing USB mode, see page 8.16.

Installing Drum and Toner Cartridges

1 Pull the release lever to open the side cover.
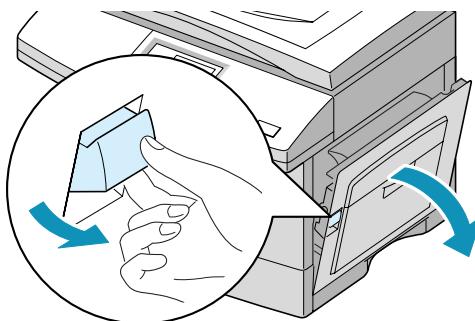
CAUTION: Ensure that the side cover is always open before opening the front cover.

2 Open the front cover.
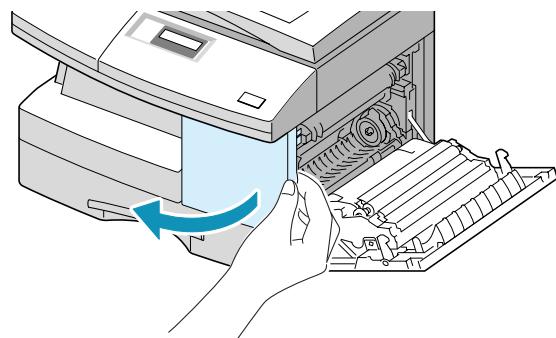
3 If the cartridge locking lever is on the lower position, turn the lever upward until it locks into place.
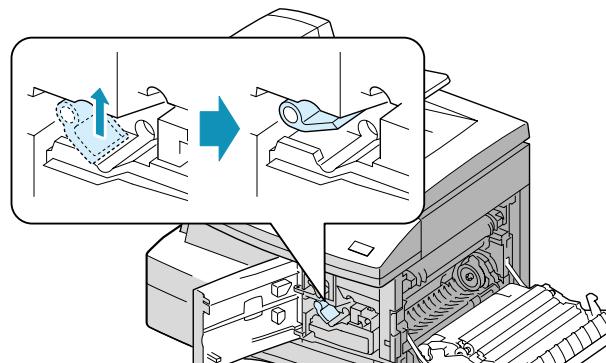
4 Remove the drum cartridge from its bag and slide it into the product firmly until it locks into place completely.
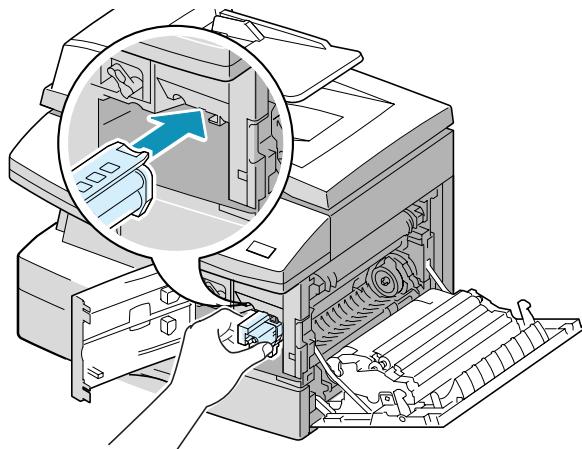
5 Remove the starter toner cartridge from its bag. Gently shake the cartridge to loosen the toner.
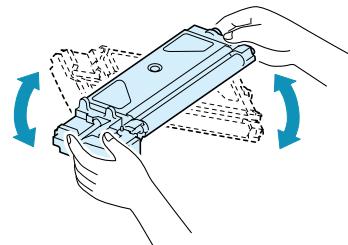
Thoroughly shaking the cartridge will assure maximum copies per cartridge.

6 Slide the toner cartridge into the product aligning the cartridge to the left of the slot until it locks into place completely.
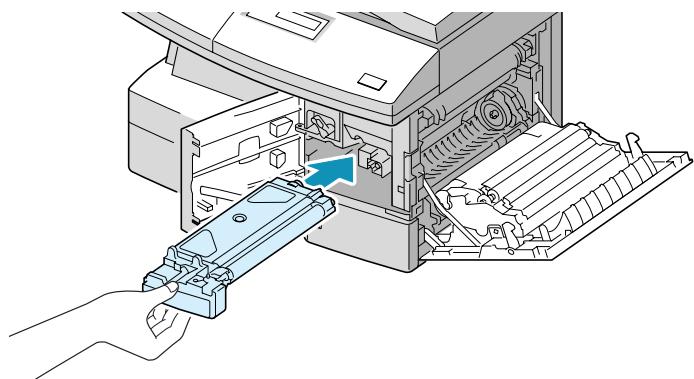
7 Turn the cartridge locking lever downwards until it locks into place.
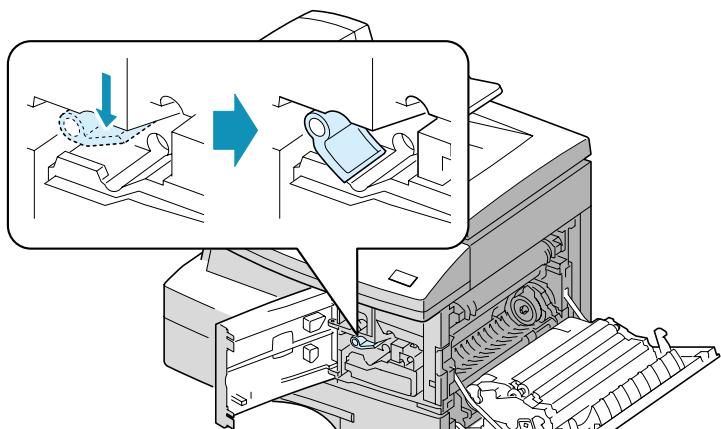
8 Close the front cover ❶ and the side cover ❷ .
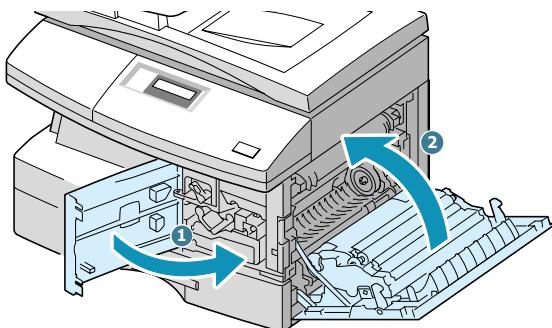
NOTE: When the drum or toner cartridge need to be replaced, the display indicates the corresponding message with the error indicator. Refer to the list of error messages on page 8.11.

To replace the drum and toner cartridges, see page 7.8 and page 7.3 repectivly.

Turning the Product On

1 Plug one end of the supplied three-wire electrical grounding type cord into the AC socket on the product and the other end into a properly grounded AC outlet.
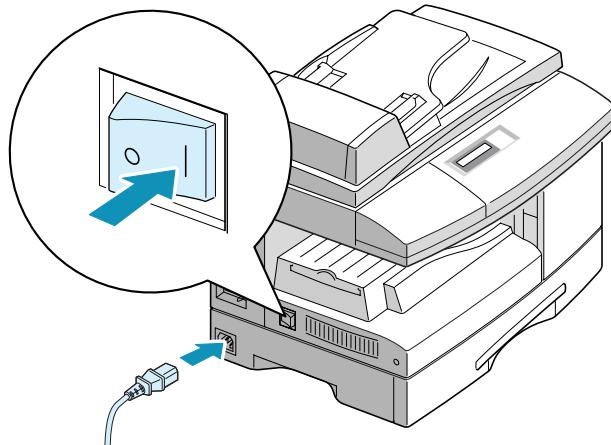
2 Turn on the power switch. "WARMING UP PLEASE WAIT" appears on the display indicating the product is on.

To view your display text in another language, see page 1.20.

Loading Paper

The paper cassette can hold a maximum of 550 sheets of 20lb plain paper. For copying or faxing, you can use A4-, letter-, or legal-size paper only.

1 Pull open the paper cassette.
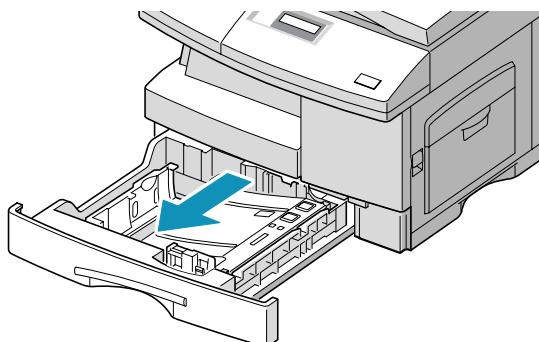
2 Push down on the pressure plate until it locks in position.
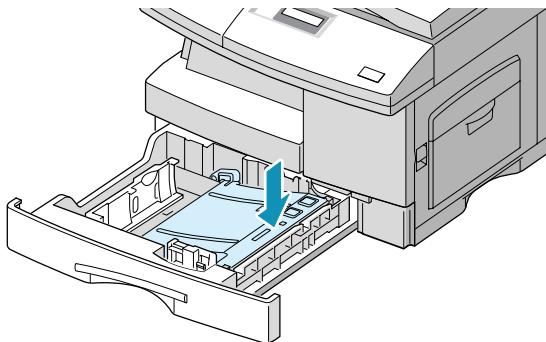
3 Adjust the rear paper guide to the desired paper length. It is preset to Letter or A4 size depending on country. To load another size, lift and insert the rear guide into the corresponding position.

Rear guide
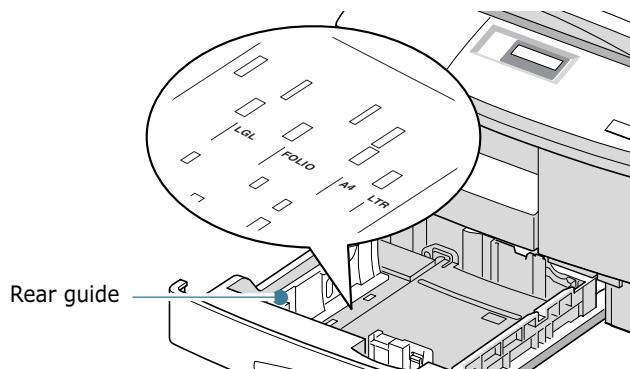
4 Fan the paper and insert it into the cassette.
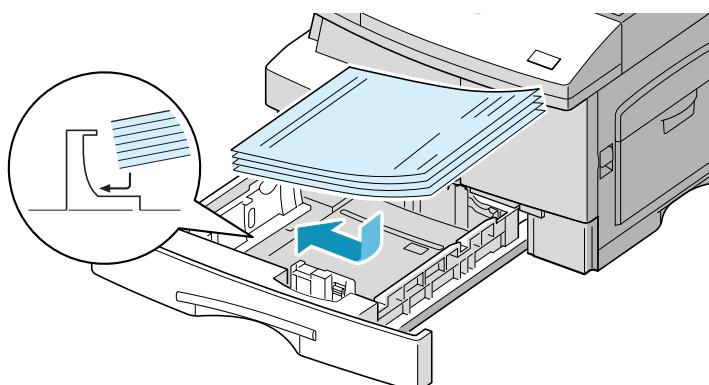
5 Ensure that the paper corners are under the corner snubbers.

Corner snubber
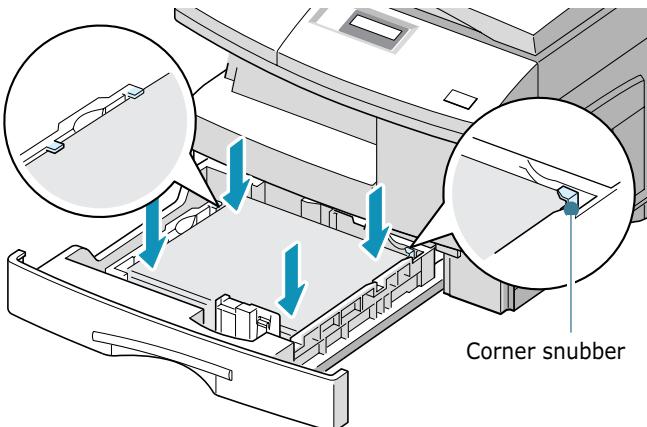
Do not fill above the max fill line.

Max Fill Line
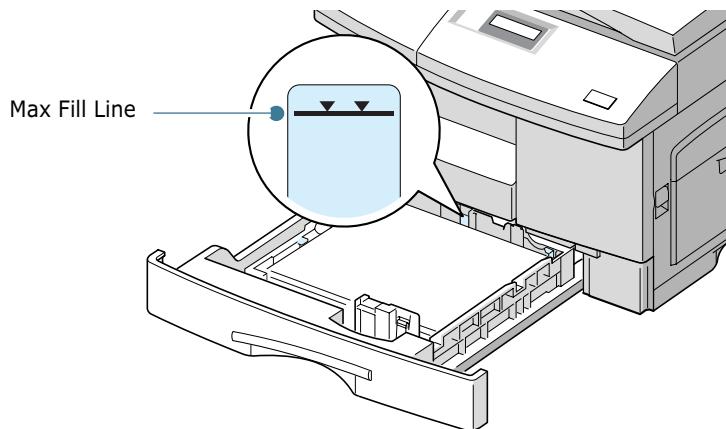
6 While squeezing the side guide as shown, move it toward the stack of paper until it lightly touches the side of the stack. Do not too tightly to press the guide the edge of the paper; the guide may bend the paper.
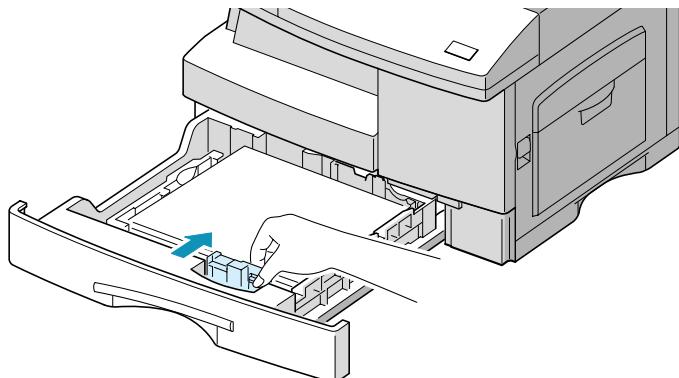
7 Close the paper cassette.

Setting the Paper Size

After loading paper in the paper cassette, you have to set the paper size using the control panel buttons. These settings will apply to the Copy mode only. In PC printing mode, you have to select the paper size in the application program you use.

1 Press **Menu/Exit** and then **System Data** from the one-touch dial keypad. SCX-5112 users should press **Menu** and then **Enter**.

The display shows "CASSETTE PAPER" on the top line and the available options on the bottom line.

2 Use < or > to select the paper size you are using, and press **Mode/Enter** (**Enter** for SCX-5112) to save the selection.

You can press the corresponding number shown on the display to select the paper size.

3 To return to Standby mode, press **Stop/Clear**.

Changing the Display Language

To change the language that is displayed on the LCD display, take the following steps:

1 Press **Menu/Exit** and then **System Setup** from the one-touch dial keypad. SCX-5112 users should press **Menu** and then **Enter**.

2 Press ∧ or ∨ until "SELECT LANGUAGE" appears on the top line of the display. The current setting appears on the bottom line of the display.

3 Press < or > until you see the language you want on the display.

4 Press **Mode/Enter** (**Enter** for SCX-5112) to save the selection.

5 To return to Standby mode, press **Stop/Clear**.

Using Save Mode

Toner Save

Toner Save feature allows the printer to use less toner on each page. Activating this mode will extend the life of the toner cartridges two times longer than normal mode, but will reduce the print quality.

To turn the Toner Save mode on, take the following steps:

1   Press **SAVE Toner**. The display shows the current setting on the bottom line.

2   Press **SAVE Toner** or use the navigation buttons to change the setting.

    To enable the Toner Save mode on, select "ON." The button backlight is on. To disable the mode, select "OFF." The button backlight is off.

3   Press **Mode/Enter** (**Enter** for SCX-5112) to save the selection.

Paper Save

This feature prints 2 pages on a single sheet of paper to save paper. To turn this feature on, take the following steps:

1   Press **SAVE Paper**. The display shows the current setting on the bottom line.

2   Press **SAVE Paper** or use the navigation buttons to change the setting. To enable the Paper Save mode, select "ON." Or select "OFF" to disable the mode.

3   Press **Mode/Enter** (**Enter** for SCX-5112) to save the selection.

NOTES:
- The Paper Save mode is available only when the document is loaded in the ADF.
- The Paper Save mode will be disabled when you set the collation copy or the duplex copy.

Power Save

The Power Save mode allows the printer to reduce power consumption when it is not in actual use. To turn the Power Save mode on, take the following steps:

1 Press **SAVE Power**. The display shows the current setting on the bottom line.

2 Press **SAVE Power** or use the navigation buttons to change the setting. To enable the Power Save mode, select "ON." Or select "OFF" to disable the mode.

3 Press **Mode/Enter** (**Enter** for SCX-5112) to save the selection.

You can further select the length of time the product waits after a job is printed before it switches to a reduced power state.

1 Press **Menu/Exit** and then **System Data** from the one-touch dial keypad. SCX-5112 users should press **Menu** and then **Enter**.

2 Press ∧ or ∨ until "POWER SAVE" appears on the display. Make sure that "1.ON" blinks on the bottom line.

If necessary, use < or > to select "1.ON" and press **Mode/Enter** (**Enter** for SCX-5112).

3 The available time settings appear on the display and the current setting blinks. The available options are 5, 10, 15, 30, and 45 (minutes). Press < or > until the desired time blinks.

4 Press **Mode/Enter** (**Enter** for SCX-5112) to save the selection.

5 To return to Standby mode, press **Stop/Clear**.

2 INSTALLING SOFTWARE

This chapter provides information on installing the supplied Samsung software. You must install the Samsung software to use your product as a printer and scanner.

The topics included in this chapter are:

- **About Samsung Software**

- **System Requirements**

- **Installing Samsung Software**

- **Configuring Fax and Internet Gates**

- **Uninstalling Samsung Software**

About Samsung Software

You must install the SmarThru CD-ROM after you have setup your product and connected it to your computer. The SmarThru CD-ROM includes the following:

- MFP Driver
- SmarThru Software
- OCR Software (AnyPage Lite)

MFP Driver

To use your product as a printer and scanner, you must install the MFP driver.

SmarThru Software

SmarThru is the accompanying software for your multifunctional product. SmarThru contains a powerful image editor that allows you to edit images in many ways and also includes powerful Internet mail client software.

With SmarThru, you can save the scanned images in a dedicated storage area for subsequent editing, sending via e-mail or fax, printing, and processing by other programs of your choice.

OCR Software (AnyPage Lite)

OCR (Optical Character Recognition) is software that has the ability to recognize most character formats, so that a scanned document can be read and edited with word processing software.

System Requirements

Before you begin, ensure your system meets the minimum requirements.

Supported Operating System

Windows 95 OSR2/Windows 98/Windows 98 SE/Windows Me/ Windows NT 4 Workstation or Server with Service Pack 3/ Windows 2000 Professional or Advanced Server/Windows XP Home edition or Professional.

Minimal Requirements

- Disk space: 120 MB for installation
- Memory: 64 MB
- CPU: Pentium II 233 or higher
- Required software: Internet Explorer 4.01.

Recommended

- Disk space: 220 MB for installation
- Memory: 128 MB
- CPU: Pentium II 400 or higher
- Required software: Internet Explorer 5.5

NOTES:
- Administrative rights should be set for installation on Windows NT/2000/XP.
- Windows 95 versions prior to OSR2 are not recommended due to compatibility with OLE/COM libraries.

Installing Samsung Software

1 Insert the supplied SmarThru CD-ROM into your CD-ROM drive.

The SmarThru CD-ROM should automatically run and opening window appears.

If the opening window does not appear, click **Start**, and then **Run**. Type **X:Autorun.exe**, replacing "**X**" with the letter of your drive, and click **OK**.

2 If you are asked to select the language, choose the desired language.

3 Click **Install the Samsung Software on your PC**.

Installs the Samsung Software on your PC.

Uninstall the Samsung Software. See page 2.16.
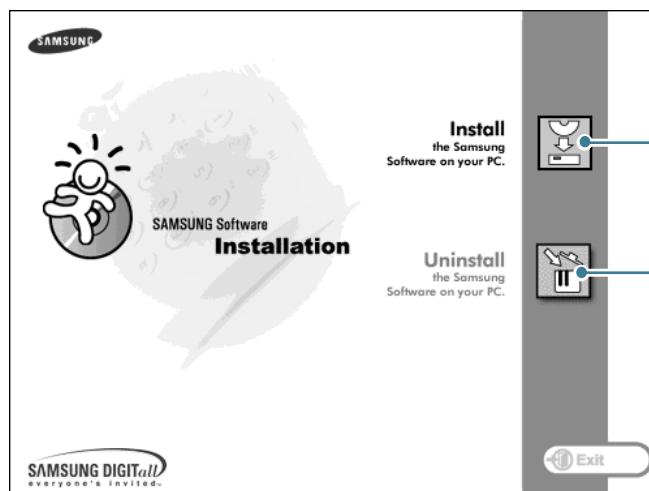
4 Follow the on-screen instructions and click **Next**.

5 The SmarThru installation supports three types of setup:

- •**Typical:** Program will be installed with the most common options and is recommended for most users.
- •**Compact:** Only the MFP driver will be installed.
- •**Custom:** You may choose the options you want to install. Recommended for advanced users.
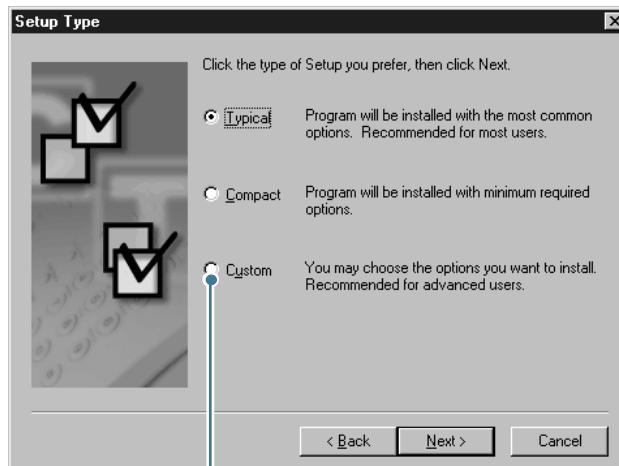
If you select the Custom installation, you may choose the options you want to install.
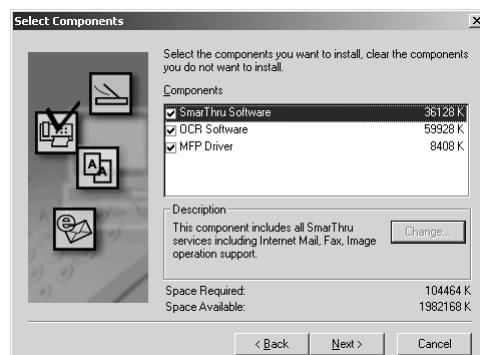
- • **SmarThru Software:** to scan and edit images and work with electronic documents.
- • **OCR Software:** AnyPage Lite software to enable OCR.
- • **MFP Driver:** to print and scan.

6 Selecting the type, Click **Next**.

7 You can choose **SmarThru networking** option. This feature allows you to share the modems on your computer and the product as a scan device via a network or to access these shared devices located on other computers.

Stand-alone configuration does not allow you to use any networking features such as Remote Fax or Remote Scan service.
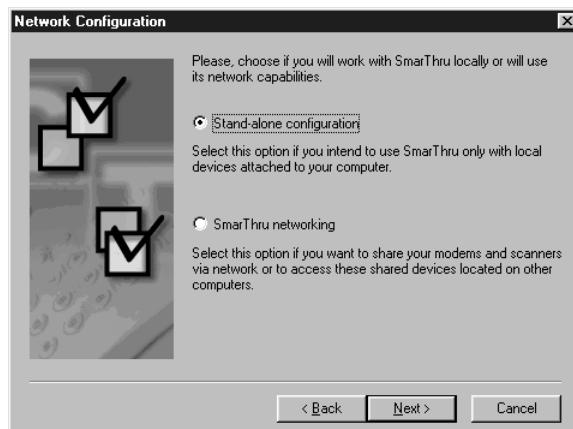
If you selected **SmarThru networking**, you can select to install Server, Client, or both.
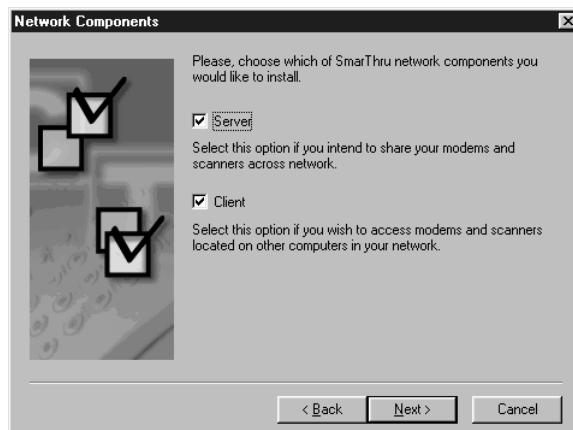
Server allows you to share local fax modem and/or scanner over a LAN. You can control sharing by managing remote service user. **Client** allows you to use Remote Fax or Remote Scan services provided by SmarThru Remote Services Server over a LAN. You need to have a client account. These accounts are provided by the server. For details on Remote Fax/Scan Services, please refer to the SmarThru User's Guide.

8 Click **Next**.
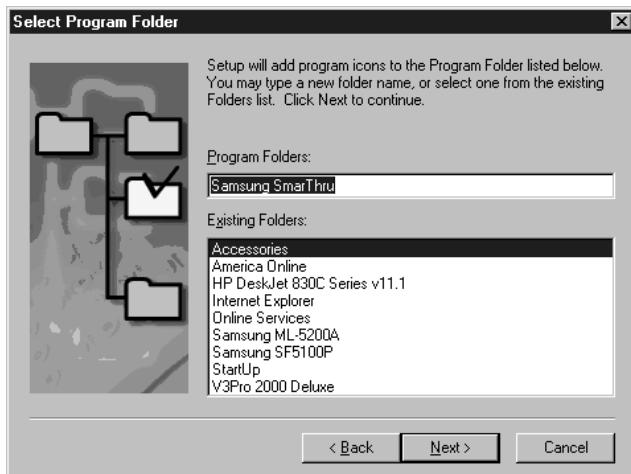
9 When the installation is completed, shut down and restart your computer.

If your computer does not shut down and restart automatically, you must shut it down manually and restart it before the changes will be saved.

NOTE: When you install the software, the Digital Signature Not Found window appears in Windows 2000 and Windows XP. Click **OK** in Windows 2000 and click **Continue Anyway** in Windows XP.

Configuring Fax and Internet Gates

If you select **SmarThru networking Server** option (see page 2.6), when your computer restarts after the Samsung software has installed, you will be prompted to configure the fax and Internet gates allowing you to send and receive faxes and e-mails on the SmarThru system.

If you select the **Stand-alone** or **SmarThru networking Client** option (see page 2.6), the following wizards appear only the first time you try to launch Mailbox in the SmarThru program. For information on SmarThru, please refer to the SmarThru User's Guide.

NOTE: To configure the Internet gate, you must enter your e-mail address, incoming (POP3 or IMAP4) and outgoing (SMTP) mail server address, and account name. Ask your Internet service provider or on-line service provider for the information on your Internet gate configuration.

1 When the New Modem Wizard appears, choose the system modem installed in your system and then click **Next**. This fax modem will be used by SmarThru Fax Gate for sending and/or receiving faxes.
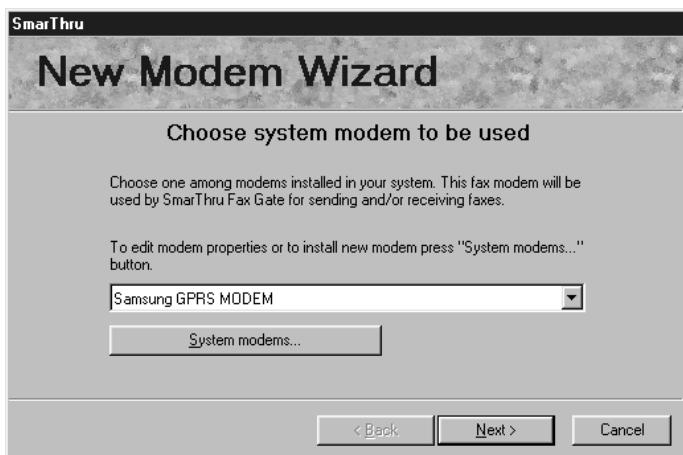
2 Click **Finish** to save the modem setting.

3 Enter your name and e-mail address, then click **Next**. The e-mail address has been assigned to you by your Internet service provider.

4 Enter the addresses of your incoming and outgoing mail servers. Choose the incoming mail server type, then click **Next**. Your Internet service provider will be able to provide you with this information.

5 Enter your account name and password to access your Internet mail server, then click **Next**. Your Internet service provider will be able to provide you with this information.

> **SmarThru**
>
> # New Mail Account Wizard
>
> ## Incoming mail server
>
> Please type your POP3 or IMAP4 account user name and password to access your Internet mail server. Your Internet service provider must give you this information.
>
> Account user name: bruce999
>
> Password: ******
>
> (Your password will appear in asterisks to prevent others from reading it.)
>
> [< Back] [Next >] [Cancel]

6 Enter the account record name, then click **Next**.

> **SmarThru**
>
> # New Mail Account Wizard
>
> ## Account record name
>
> Please type account record name. This name will be used to refer it in Internet Gate Configuration and any incoming mail information notifications.
>
> Account name:
>
> chollian
>
> [< Back] [Next >] [Cancel]

7 Click **Finish** to quit the wizard and enable Internet e-mail service.

NOTE: If you wish, you can reconfigure the Internet gate later by using SmarThru Configuration. For details, refer to the SmarThru User's Guide.

Uninstalling Samsung Software

Uninstall is required if you are upgrading the software or if your installation fails. You can uninstall all software including SmarThru and MFP drivers using the SmarThru CD or selectively uninstall the desired item using the Window unInstallShield.

Note: Before beginning un-installation, ensure all applications are closed on your PC. A system reboot is required after the software is uninstalled.

Uninstalling the MFP Driver

1 From the **Start** menu, select **Programs**, then select **Samsung SCX-5x12 Series**.
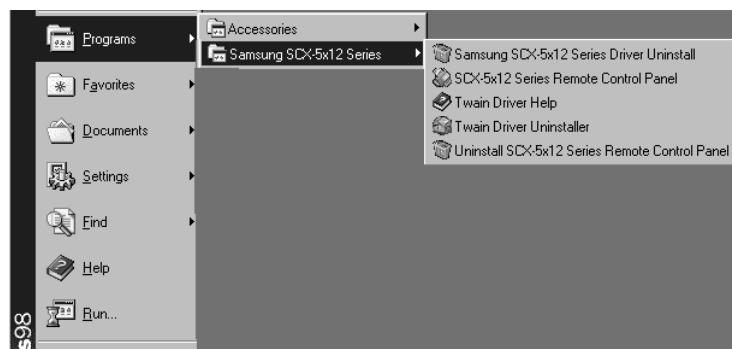
2 You can select the component in the MFP driver to uninstall individually.

If you want to uninstall the scan driver, select **TWAIN Driver Uninstaller**.

If you want to uninstall the printer driver, select **Samsung SCX-5x12 Series Driver Uninstall**.

If you want to uninstall the Remote Control Panel, select **Uninstall SCX-5x12 Series Remote Control Panel**.

3 When your computer confirms your selection, click **Yes**. The selected printer driver and all its components are removed from your computer.
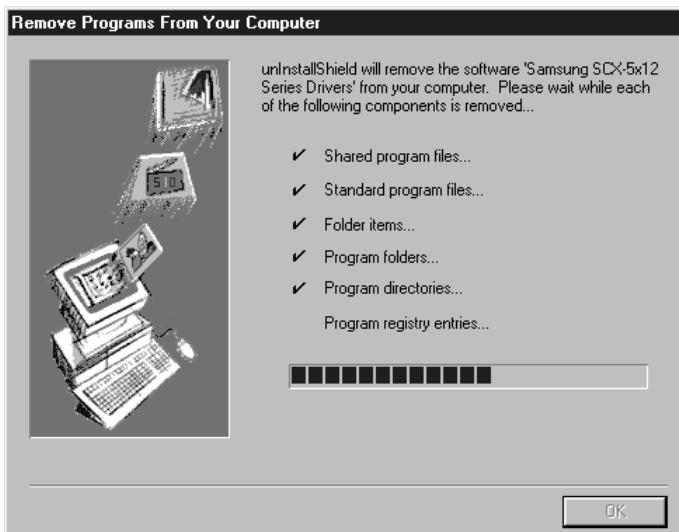
4 When the uninstallation is done, click **OK**.

5 The message box recommends you restart your computer. Click **OK**, then restart Windows.

NOTE: If you want to install the printer driver or the scan driver using the SmarThru CD-ROM, make sure that you select the Setup Type to **Compact**. Or select **Custom** then select **MFP Driver**. For details, see page 2.5.

Uninstalling Samsung SmarThru

1 From the **Start** menu, select **Programs**.

2 Select **Samsung SmarThru**, then select **SmarThru 3 Uninstall**.

3 When your computer asks you to confirm your selection, click **Yes**. The Uninstall Options dialogue box appears.
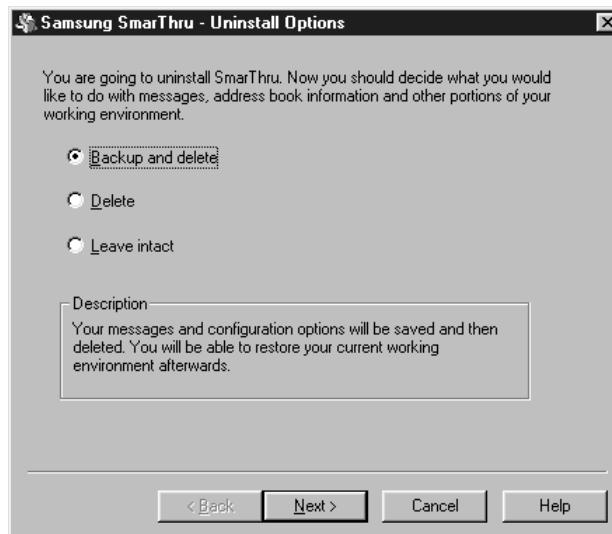
Uninstall options are:

• **Backup and delete:** Backs up all your data and options to a safe place. Then removes SmarThru system including the data.

• **Delete:** Deletes all the SmarThru data and options. No backup or copying takes place. Be careful while using this option as you can easily lose your data.

• **Leave intact:** Uninstalls SmarThru software leaving data and option intact. This can be useful, if, for example, you decide to install Stand Alone configuration over SmarThru Networking. In this case, uninstall Samsung SmarThru having **Leave intact** option set and install SmarThru Stand Alone configuration.

4 After selecting the uninstall option, click **Next**.

5 Follow the on-screen instructions to complete the un-installation. The SmarThru software and all components will be removed.

6 When uninstalling is done, click **OK**. The message box recommends restarting your computer.

7 Click **OK**.

Shut down and restart your computer to complete the un-installation process and save your changes.

Using the SmarThru CD-ROM

You can un-install both the MFP driver and the SmarThru software with the CD-ROM you have used to install the software.

1 Insert the SmarThru CD-ROM into your CD-ROM drive.

The SmarThru CD-ROM should automatically run and the opening window appears. (If the opening window does not appear, select **Run** from the Start menu, then type **X:Autorun.exe**, replacing "**X**" with the letter of your drive and click **OK**.

2 If you are asked to select the language, choose the desired language.

3 Click **Uninstall the Samsung Software on your PC**.
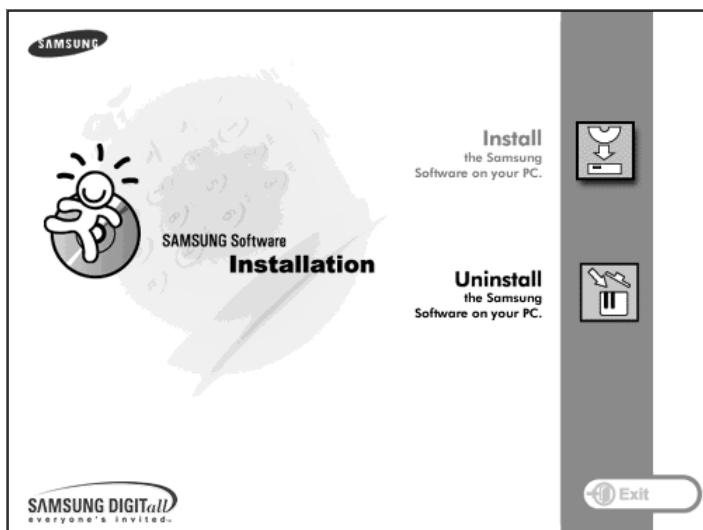
4 Follow the on-screen instructions to complete un-installation.

You must shut down and restart your computer before any changes you have made will take affect.

3 PAPER HANDLING

This chapter introduces you to the basics of selecting print media and loading print media into your product.

This chapter includes:

- **Selecting Print Media**
- **Paper Guidelines**
- **Loading Paper in Cassette**
- **Using the Bypass Tray**
- **Setting the Paper Size for Copying**

Selecting Print Media

Always use print media that meets the guidelines for use with this product. Using a print media that is not recommended may cause paper jams or print quality problems.

Media Size Input Sources and Capacities

Media Size	Input Source/Capacity[a]	
	Paper Cassette	**Bypass Tray**
Plain paper		
Letter (8.5 x 11 in.)	YES/550	YES/100
Folio (8.5 x 13 in.)	YES/550	YES/100
Legal (8.5 x 14 in.)	YES/550	YES/100
Executive (7.25 x 10.5 in.)	NO/0	YES/100
A4 (210 x 297 mm)	YES/550	YES/100
B5 (182 x 257 mm)	NO/0	YES/100
A5 (148 x 210 mm)	NO/0	YES/100
Envelopes		
No. 10 (4.12 x 9.5 in.)	NO/0	YES/10
C5 (162 x 229 mm)	NO/0	YES/10
DL (110 x 220 mm)	NO/0	YES/10
Monarch (3.87 x 7.5 in.)	NO/0	YES/10
B5 (176 x 250 mm)	NO/0	YES/10
Labels[b]		
Letter (8.5 x 11 in.)	NO/0	YES/30
A4 (210 x 297 mm)	NO/0	YES/30
Transparency films[b]		
Letter (8.5 x 11 in.)	NO/0	YES/30
A4 (210 x 297 mm)	NO/0	YES/30
Card stocks[b]		
A6 (105 x 148 mm)	NO/0	YES/10
Post Card (4 x 6 in.)	NO/0	YES/10
Hagaki (100 x 148 mm)	NO/0	YES/10

a. Depending on paper thickness, maximum capacity may be reduced.
b. If you are experiencing excessive jamming, feed one sheet at a time through the Bypass Tray.

Paper Guidelines

When selecting or loading paper, envelopes, or other special media, keep these guidelines in mind:

- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.

- Use only high quality copier grade paper. Avoid paper with embossed lettering, perforations, or texture that is too smooth or too rough.

- Store paper in its ream wrapper until ready to use. Place cartons on pallets or shelves, not on the floor. Do not place heavy objects on top of the paper, whether it is packaged or unpackaged. Keep it away from moisture, or other conditions that can cause it to wrinkle or curl.

- During storage, moisture-proof wrap (any plastic container or bag) should be used to prevent dust and moisture from contaminating your paper.

- Always use paper and other media that conform with those listed under "General Specifications" on page 9.2.

- Use only well-constructed envelopes with sharp, well creased folds.
  - DO NOT use envelopes with clasps and snaps.
  - DO NOT use envelopes with windows, coated lining, self-adhesive seals, or other synthetic materials.
  - DO NOT use damaged or poorly made envelopes.

- It is recommended that you feed special paper types one sheet at a time.

- Only use the special media recommended for use in laser printers.

- To prevent special media such as transparencies and label sheet sticking together, remove them from the exit tray as they are printed.

- Place transparencies on a flat surface after removing them from the product.

- Do not leave the film in the paper tray for long periods of time. Dust and dirt may accumulate on the film resulting in spotty printing.

- To avoid smudging caused by fingerprints, handle transparency film and coated paper carefully.

- To avoid fading, do not expose the printed film to prolonged sunlight.

- Store unused media at temperatures between 59ºF and 86ºF (15ºC to 30ºC). The relative humidity should be between 10% and 70%.

- Do not load more than 10 sheets of special media into the Bypass Tray at a time.

- Verify that the labels' adhesive material can tolerate fusing temperature of 200ºC (392ºF) for 0.1 second.

- Make sure that there is no exposed adhesive material between the labels. Exposed areas can cause labels to peel off during printing, which can cause paper jams. Exposed adhesive can also cause damage to product components.

- Do not feed a sheet of labels through the product more than once. The adhesive backing is designed for one pass through the product.

- Do not use labels that are separating from the backing sheet or are wrinkled, bubbled, or otherwise damaged.

Loading Paper in Cassette

The paper cassette can hold a maximum of 550 sheets of 20lb plain paper. For copying or faxing, you can use A4-, letter-, or legal-size paper only.

To load paper, pull open the paper cassette and load paper with the print side facing up.
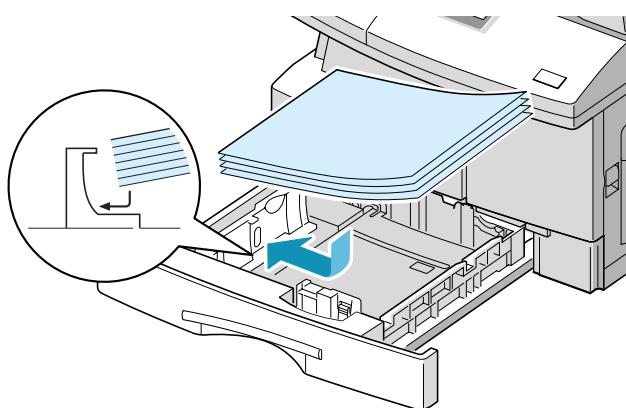
You can load letterhead paper with the design side facing up. The top edge of the sheet with the logo should be placed at the right side.
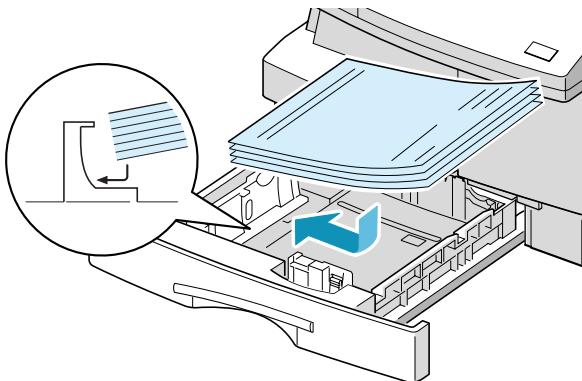
For details on loading paper in the cassette, see page 1.17.

After loading paper in the cassette, you have to set the correct paper size using the control panel buttons. See page 1.20.

NOTES:
- When you print a file from your PC using the paper cassette, make sure that you select the Paper source and the correct paper size from your software application before starting your print job.
- If you experience problems feeding paper, place the paper in the Bypass tray.
- When printing on the used paper from the cassette, you can load up to 300 sheets. The printed side should be facing down and the edge without curl at the right side. If you experience problems feeding paper, turn the paper around. Note that the print quality is not guaranteed.
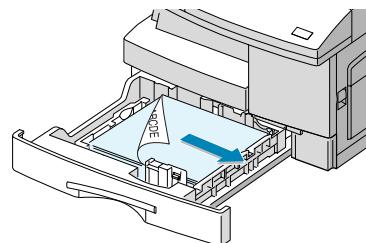
Using the Bypass Tray

The Bypass tray is located at the right side of your product. It can be closed when you are not using it, making the product more compact.

Use the bypass tray to print transparencies, labels, envelopes or postcards in addition to making quick runs of paper types or sizes that are not currently loaded in the paper cassette.

Acceptable print media are plain paper with sizes ranging from 3.9x5.8, to Legal 8.5 x 14 inch, the largest size acceptable, and weighing between 16lb and 32lb.

The following table summarizes the print media allowed as well as their stacking height limit.

Paper Type	Stacking Height Limit
Plain Paper	100 sheets or 9mm (max)[a]
Envelope	10 envelopes or 9mm (max)[a]
Transparency	30 sheets or 9mm (max)[a]
Label	30 sheets or 9mm (max)[a]
Cardstock	10 sheets or 9mm (max)[a]

a. The height is measured with the stack of sheets laid, without being touched by hands, on a flat surface.

Notes:
- Always load only the print media specified in Specifications to avoid paper jams and print quality problems.
- Do not hit the bypass tray or rest your hands on it; otherwise the tray may be damaged or detached from the product.
- Remove any curl on postcards, envelopes, and labels before loading them into the multi-sheet bypass feeder.

To load print media in the Bypass tray:

1 Lower the Bypass tray, located on the right side of the product. Unfold the paper support extension as shown.

Paper support

Bypass tray
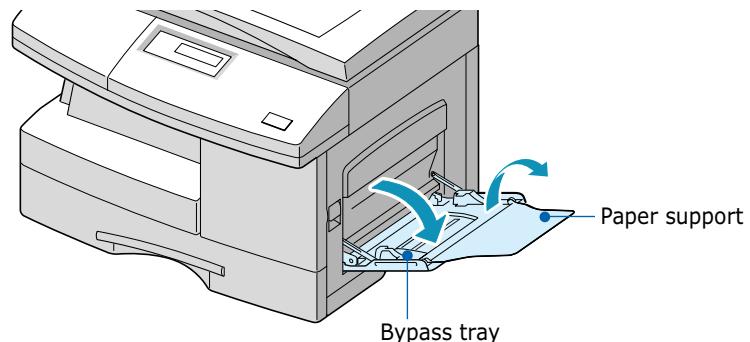
2 Prepare a stack of paper or envelope for loading by flexing or fanning them back and forth. Straighten the edges on a level surface.
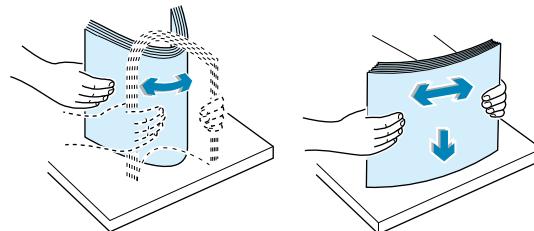
For transparencies; hold the transparencies by the edges and avoid touching the print side. Oils from your fingers that are deposited on the transparency can cause print quality problems. If you are using the transparencies with paper backing, insert a sheet of plaing paper on the tray before loading transparencies. Doing so prevents paper jams while feeding.

3 Load the print material with the print side facing down and against the right edge of the tray.
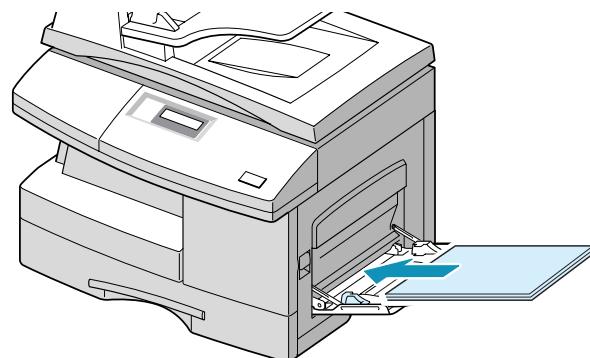
4 Adjust the paper guide to the width of the stack of print material.
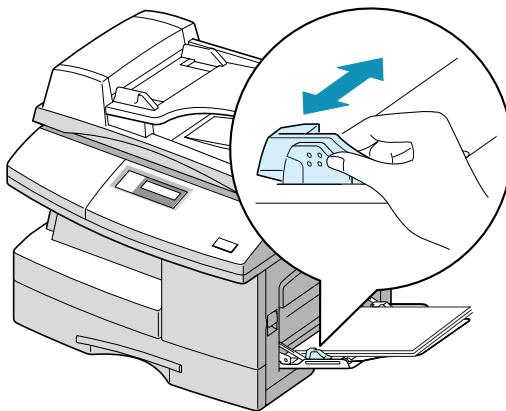
Make sure that you have not loaded too much print media. The stack should be under the max. fill line. The print media buckles if you load a stack that is too deep, or push it in too far.

Max. fill line
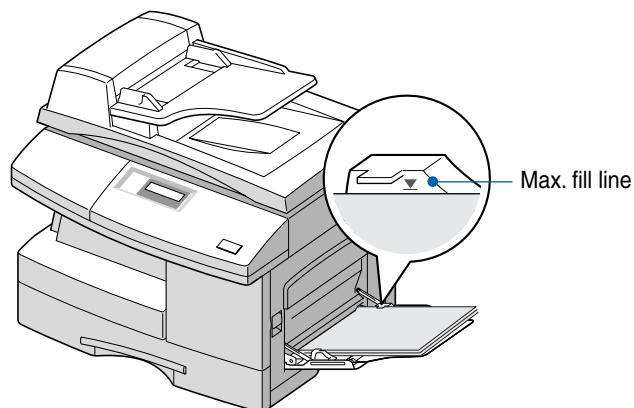
NOTES: When printing on the used paper from the bypass tray, the printed side should be facing up and the edge without curl at the left side. If you experience problems feeding paper, turn the paper around.
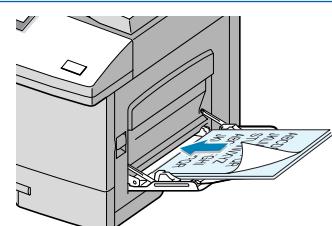
Setting the Paper Size for Copying

After loading paper in the paper cassette or the bypass tray, you have to set the correct paper size using the control panel buttons. These settings will apply to the Copy mode, and the Fax mode (SCX-5312F only). In PC printing mode, you have to select the paper size in the application program you use.

To set the paper size for cassette, take the following steps:

1 Press **Menu/Exit** and then **System Data** from the one-touch dial keypad. SCX-5112 users should press **Menu** and then **Enter**.

The display shows "CASSETTE PAPER" on the top line and the available options on the bottom line. The current setting blinks.

2 Use < or > to select the paper size you are using, and press **Mode/Enter** (**Enter** for SCX-5112) to save the selection.

You can press the corresponding number shown on the display to select the paper size.

3 To return to Standby mode, press **Stop/Clear**.

To set the paper size for the bypass tray, take the following steps:

1 Press **Menu/Exit** and then **System Data** from the one-touch dial keypad. SCX-5112 users should press **Menu** and then **Enter**.

The display shows "CASSETTE PAPER" on the top line and the available options on the bottom line.

2 Use ∨ to display "BYPASS TRAY" on the top line. The available options appears on the bottom line and the current setting blinks.

3 Use < or > to select the paper size you are using, and press **Mode/Enter** (**Enter** for SCX-5112) to save the selection.

You can press the corresponding number shown on the display to select the paper size.

4 To return to Standby mode, press **Stop/Clear**.

NOTE

4 COPYING

This chapter provides step-by-step instructions for copying documents.

This chapter includes:

- **Loading Paper for Copy Output**
- **Selecting Paper Tray**
- **Making Copies from the Automatic Document Feeder**
- **Making Copies on the Document Glass**
- **Setting Copy Options**
- **Auto Fit**
- **Clone**
- **Duplex Copy**
- **Collation Copy**

Loading Paper for Copy Output

You can copy to a size of media as small as an index card (3.9 by 5.8 inch) or as large as a sheet of legal-sized (8.5 by 14 inch) paper.

The instructions for loading the print media are the same whether you are printing, faxing, or copying. For details, see page 1.17 and 3.6.

Selecting Paper Tray

After loading print media for copy output, you have to select the paper tray you will use for the copy job, and the fax job (SCX-5312F only).

1   Press **Paper Tray**. The current setting appears on the bottom line of the display.

2   Select "CASSETTE" or "BYPASS" by pressing **Paper Tray** repeatedly or using the navigation buttons, and press **Mode/Enter** (**Enter** on SCX-5112) to save the selection.

3   If you selected "BYPASS" at the step 2, the display prompts you to select the PAPER TYPE for the bypass tray.

    Use the navigation buttons to select the paper type you are using in the bypass tray.

4   Press **Mode/Enter** (**Enter** on SCX-5112) to save the selection.

Making Copies from the Automatic Document Feeder

Using the ADF(Automatic Document Feeder), you can load up to 30 documents (20lb, 75 g/m^2) in one job. Ensure documents are in good condition, have the same thickness and weight, and that all staples and paper clips have been removed.

1 Feed the documents (up to 30 pages) **face up** into the ADF and adjust the document guides to the document size. Make sure that the bottom of the document stack matches the paper size marked on the ADF.
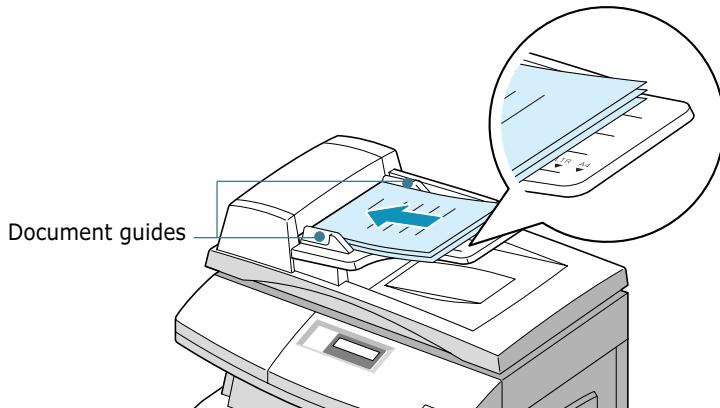
Document guides

2 SCX-5312F users should verify that the product is in the Copy mode. If necessary, press **Mode/Enter** to change the mode into the Copy mode. In the Copy mode, the LCD display shows:

Copy size ——— 100% ▶ P.1 ——— Number of copies
READY TO COPY

Note that you cannot make copies in the Fax mode. The product will only sound an error beep.

3 Make sure that you have selected the required paper tray. See page 4.2.

4 Customise the copy settings incluing the number of copies, copy size, contrast and image type using the control panel buttons. See "Setting Copy Options" on page 4.6.

To clear the settings, use the **Stop/Clear** button.

5 If necessary, you can use special copy features such as collation and duplex copy.

6 Press **Copy/Start** to begin copying. The display shows the copy processing.

> **NOTE:** Dust on the ADF glass may cause the black lines on the printout, so keep it always clean.

Making Copies on the Document Glass

If you want to make copies from booklet, pamphlet, transparencies, or documents having other unusual characteristics, use the document glass to load document.

1 Lift the document cover.
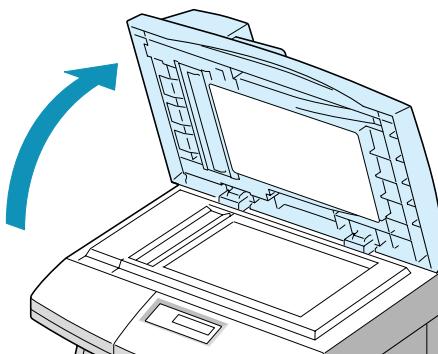
2 Place the document **face down** on the glass and align it with registration guide on the left top corner of the document glass.
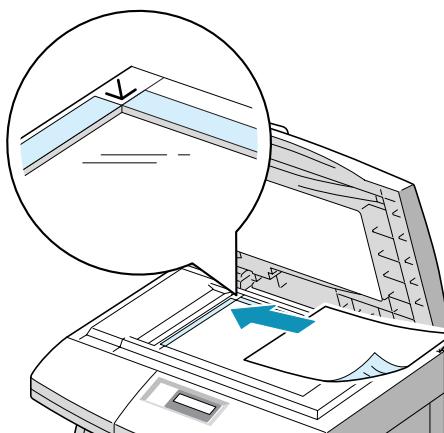
NOTE: Make sure that no other documents are in the ADF. If a document is detected in the ADF, the document has a priority than the document on the glass.

3 Close the document cover.

NOTE:
- Leaving the cover open while copying will affect the copy quality and toner consumption.
- If you are copying a page from a book or magazine, close the cover flat. The slanted cover may cause heavy exposure of the light when scanning.

4 SCX-5312F users should verify that the product is in the Copy mode. If necessary, press **Mode/Enter** to change the mode into the Copy mode. In the Copy mode, the LCD display shows:

Copy size ———— 100% ▶ P.1 ———— Number of copies
READY TO COPY

Note that you cannot make copies in the Fax mode. The product will only sound an error beep.

5 Make sure that you have selected the required paper tray. See page 4.2.

6 Customise the copy settings incluing the number of copies, copy size, contrast and image type using the control panel buttons. See "Setting Copy Options" on page 4.6.

To clear the settings, use the **Stop/Clear** button.

7 If necessary, you can use special copy features such as Auto Fit and Clone.

8 Press **Copy/Start** to begin copying. The display shows the copy processing.

NOTES:
- You can cancel the copy job during operation, press **Stop/Clear**, the copying will be stopped.
- Dust on the document glass may cause the black spots on the printout, so keep it always clean.

Setting Copy Options

The following buttons on the control panel let you make all the basic copy options: contrast, image type, number of copies and copy size. Use the buttons before pressing **Copy/Start** when you make copies.

Image

Image setting is used to improve the copy quality. To select the image type, take the following steps:

1 Press **Image**. You can see the current setting on the bottom line of the display.

2 Press **Image** repeatedly or use the navigation buttons until the desired mode appears. You can choose from:

TEXT: Use for documents containing mostly text.
MIXED: Use for documents with mixed text and graphics.
PHOTO: Use when the originals are photographs.
HIGH QUALITY: Use for documents with fine details. Copy quality is good but the copy speed is low.

3 Press **Mode/Enter** (**Enter** on SCX-5112) to save the selection.

> **NOTE:** If you select the MIXED mode when you copy the document with dark background, such as a newspaper or a catalogue, from the document glass using the normal contrast, the machine will automatically remove the background colour. This will make the copy lighter than the original document. To include the background colour in your copy, load the document about 5 mm away from the guideline on the document glass or change the Contrast setting.

Contrast

You can adjust the contrast for an original document containing paint markings or dark images.

To adjust the contrast, take the following steps:

1 Press **Contrast**.

2 Press **Contrast** repeatedly or use the navigation buttons until you select the desired level. You can choose from 5 contrast settings.

Each time you press the button, the selection block on the LCD display moves to the left or to the right. As the selection block moves to the right, the contrast becomes darker.

```
CONTRAST
L [ _ _ ■ _ ] D
```
Selection block
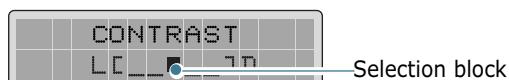
3 Press **Mode/Enter** (**Enter** on SCX-5112) to save the selection.

Set

Using the **Set** (>) button, you can select the number of copies, from 1 to 999.

1 Press **Set** (>). The triangle symbol on the middle of the top line heads for the number of copies.

2 Enter the number of copies using the number keypad. The selected number appears on the display.

You can also use **Increase** (∧) or **Decrease** (∨) to change the number of copies. Press **Increase** (∧) or **Decrease** (∨) to increase or decrease the number by 1. If you press and hold the buttons, the number increases or decreases rapidly.

3 Press **Mode/Enter** (**Enter** on SCX-5112) to save the selection.

Zoom

Using the **Zoom** (<) button, you can reduce or enlarge the size of a copied image from 25% to 400% when you copy original from the document glass, from 25% to 100% from the ADF. Note that the zoom rate available is different according to the document loading method.

1 Press **Zoom** (<). The triangle symbol on the middle of the top line heads for the zoom rate.

2 Enter the desired size using the number keypad. The selected number appears on the display.

You can also use **Increase** (∧) or **Decrease** (∨) to change the zoom rate. Press **Increase** (∧) or **Decrease** (∨) to increase or decrease the number by 1. If you press and hold the buttons, the number increases or decreases rapidly.

3 Press **Mode/Enter** (**Enter** on SCX-5112) to save the selection.

NOTES:
- If you press **Stop/Clear** while you set the copy options before starting copy, all the copy options you have set for the current copy job will be cancelled and returned to their default status.
- When you make a reduced copy, black lines may appear at the bottom of the printout.

Auto Fit

This feature automatically reduces or enlarges the original image to fit on the paper currently loaded in the prodcut, so you cannot adjust the copy size.

This special copy mode can be applied when you load document only using the document glass. So if a document is detected in the ADF, the Auto Fit does not work.

1 Load the document to be copied on the document glass, and close the cover.

2 Make sure that you have selected the required paper tray. See page 4.2.

3 To enter the special copy mode, SCX-5312F users should press **Special Copy** in the Copy mode (see page 4.5) and SCX-5112 users should press **Autofit/Clone**.

4 Press **Special Copy** (**Autofit/Clone** on SCX-5112) repeatedly or use the navigation buttons until "AUTO FIT" appears on the bottom line of the display.

5 Press **Mode/Enter** (**Enter** for SCX-5112) to save the selection.

6 If necessary, customise the copy settings incluing the number of copies, contrast and image type using the control panel buttons. See "Setting Copy Options" on page 4.6.

```
AUTO FIT  P.1
READY TO COPY
```

NOTE: You cannot adjust the copy size by using the **Zoom** button while the Auto Fit printing is enabled.

7 Press **Copy/Start** to begin copying.

8 When the copying is completed, press **Stop/Clear** to cancel the Auto Fit mode.

Clone

The Clone feature prints multiple image copies from original document on a single page. The number of images is automatically determined by the original image size, so you cannot adjust the copy size.

This special copy mode can be applied when you load document only using the document glass. So if a document is detected on the ADF, the Clone does not work.

1 Load the document to be copied on the document glass, and close the cover.

2 Make sure that you have selected the required paper tray. See page 4.2.

3 To enter the special copy mode, SCX-5312F users should press **Special Copy** in the Copy mode (see page 4.5) and SCX-5112 users should press **Autofit/Clone**.

4 Press **Special Copy** (**Autofit/Clone** on SCX-5112) repeatedly or use the navigation buttons until "CLONE" appears on the bottom line of the display.

5 Press **Mode/Enter** (**Enter** on SCX-5112) to save the selection.

6 If necessary, customise the copy settings incluing the number of copies, contrast and image type using the control panel buttons. See "Setting Copy Options" on page 4.6.

```
┌─────────────────────┐
│ CLONE       P.1     │
│ READY TO COPY       │
└─────────────────────┘
```

NOTE: You cannot adjust the copy size by using the **Zoom** button while making a clone.

7 Press **Copy/Start** to begin copying.

8 When the copying is completed, press **Stop/Clear** to cancel the Clone mode.

Duplex Copy

Duplex copy allows you to print on both sides of the paper. Duplex copy is available only when you load documents in the ADF.

Before printing in the duplex mode, decide on which edge you will bind your finished document. The binding options are:
LONG EDGE, which is the conventional layout used in book binding.
SHORT EDGE, which is the type often used with calendars.
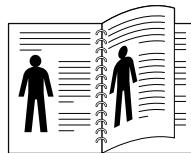
▲ Long Edge
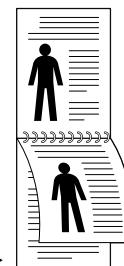
Short Edge ▶

1 Load the documents to be copied in the ADF.
   Make sure that the original document is single sided.

2 Make sure that you have selected the required paper tray. See page 4.2.

3 Press **Duplex Copy**. The current setting appears on the bottom line of the display.

4 Press **Duplex Copy** or use the navigation buttons to select the binding orientation. If you select "OFF", you cannot use duplex copying.

5 Press **Mode/Enter** (**Enter** on SCX-5112) to save the selection.

6 If necessary, customise the copy settings incluing the number of copies, copy size, contrast and image type using the control panel buttons. See "Setting Copy Options" on page 4.6.

NOTE: In the duplex copy mode, PHOTO or HIGH QUALITY setting by using the **Image** button is not enabled.

7 Press **Copy/Start** to begin copying.

8 When the copying is completed, press **Stop/Clear** to cancel the duplex copy mode.

Collation Copy

When the Collation Copy feature is on, your product sorts the copy job. For example, 2 copies of a 3 page job will print one complete document followed by the second complete document (e.g. 1, 2, 3, then 1, 2, 3). Collation copy is available only when you load documents in the ADF.

1 Load the documents to be copied in the ADF.

2 Make sure that you have selected the required paper tray. See page 4.2.

3 To enter the collation copy mode, SCX-5312F users should press **Special Copy** in the Copy mode (see page 4.3). Press **Special Copy** repeatedly or use the navigtion buttons until "COLLATION" appears on the bottom line of the display.

   SCX-5112 users should press **Collation Copy**, and press **Collation Copy** or the navigation buttons to select "ON" to turn the feature on.

4 Press **Mode/Enter** (**Enter** on SCX-5112) to save the selection.

5 If necessary, customise the copy settings incluing the number of copies, copy size, contrast and image type using the control panel buttons. See "Setting Copy Options" on page 4.6.

6 Press **Copy/Start** to begin copying.

> **NOTE:** In the duplex copy mode, PHOTO or HIGH QUALITY setting by using the **Image** button is not enabled.

7 When the copying is completed, press **Stop/Clear** to cancel the collation copy mode.

NOTE

5 PRINTING

Read this chapter to learn how to select and load print media and how to use the print settings.

This topics included in this chapter are:

- **Printing a Document**

- **Printer Settings**

Printing a Document

This procedure describes the general steps required for printing from various Windows applications. The exact steps for printing a document may vary depending on the application program you are using. Refer to your software application's documentation for the exact printing procedure.

The following steps describe the typical process to print from a Windows environment:

1 Ensure that your product is properly connected to the computer, the product is powered on, and there is paper in the paper tray.

2 Verify that you have installed the Samsung software for your computer. For details, see "Installing Samsung Software" on page 2.4.

3 Start the program you are using to create the document, and create or open the document you want to print.

4 Choose **Print** or **Print Setup** from the **File** menu. Make sure that **Samsung SCX-5x12 Series PCL 6** is selected as your default printer. Click **Properties** or **Setup** if you want to make any adjustments that are appropriate for printing your document. (For details, see "Printer Settings" on page 5.3.)
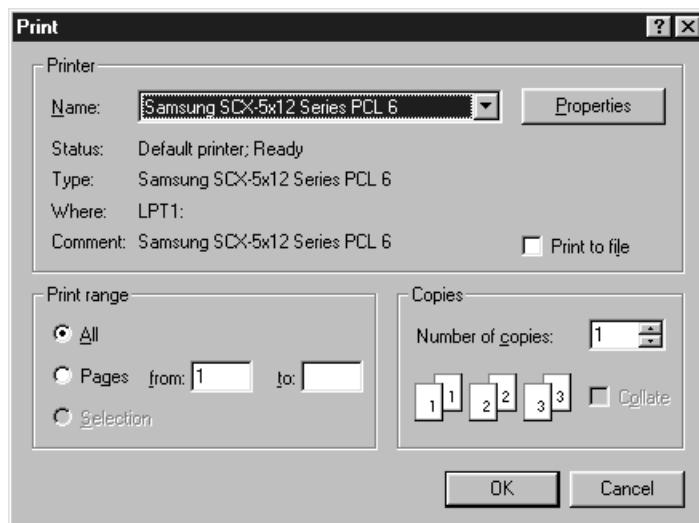
5 Click OK to close the Properties dialog box.

6 After making any necessary changes to the printing parameters, click **OK** to start the print job.

Printer Settings

You can use the product with all your Windows 95/98/Me/2000/ XP or Windows NT 4.0 applications. Be sure to set Samsung SCX-5x12 Series PCL 6 as the default printer for all your Windows operations.

Most Windows software applications allow you to make changes to the printer settings. This includes settings that determine how a print job looks such as paper size, paper orientation, and margins. Settings made in the application to create the document will usually override settings made in the printer driver.

NOTE: You do not need to use any of the operation panel buttons to use the product as a PC printer. For example, if you want to adjust the printing contrast you do not have to press **Contrast** on the control panel. The control panel buttons are used primarily for copying.

5

Accessing Printer Settings

You can access printer settings by using either of these methods.

Windows 95/98/Me

• Select the **File** > **Print** > **Properties** or **File** > **Print Setup** command from within any Windows application.

   Or

• Select **Samsung SCX-5x12 Series PCL 6** printer from the **Printers** folder, then select **File** > **Properties** (or select the printer icon in the **Printers** folder, and click the right mouse button).

Windows NT 4.0

• Select the **File** > **Print** > **Properties** or **File** > **Print Setup** command from within any Windows application.
Or

• Select **Samsung SCX-5x12 Series PCL 6** printer from the **Printers** folder, click the right mouse button, then select **Document Defaults** from the drop-down list.

Windows 2000

• Select the **File** > **Print** command from within any Windows application.
Or

• Select **Samsung SCX-5x12 Series PCL 6** printer from the **Printers** folder, click the right mouse button, then select **Properties** and **Printing Preferences** from the drop-down list.

Windows XP

• Select the **File** > **Print** > **Preferences** command from within any Windows application.

• Select **Samsung SCX-5x12 Series PCL 6** printer from the **Printers and Faxes** folder, click the right mouse button, then select **Printing Preferences** from the drop-down list.

Printer Properties Tabs

When the Printer Properties are displayed, you can review and change whatever settings are needed for your printer job.

Your printer's Properties window consists of 5 tabs: **Paper**, **Graphic**, **Output**, **Watermark** and **About**.

If you access the Printer Properties through the **Printers** folder, you can view more Windows-based tabs, as well as these 5 tabs. For information on the Windows-based tabs, refer to your Windows User Guide.

The printer's Properties window may differ depending on the operating system used. This User Guide shows the Properties window on Windows unless otherwise specified.

NOTE: If you access the Printer Properties through the **Printers** folder, any settings made will become the default settings for the printer. Settings made when the Printer Properties are accessed through an application **File** menu and **Print** or **Print Setup** will remain active until the application you are printing from is closed.

Paper Tab

Use the **Paper** tab to select what size of paper you have in your printer, the orientation, the number of copies to print, etc.
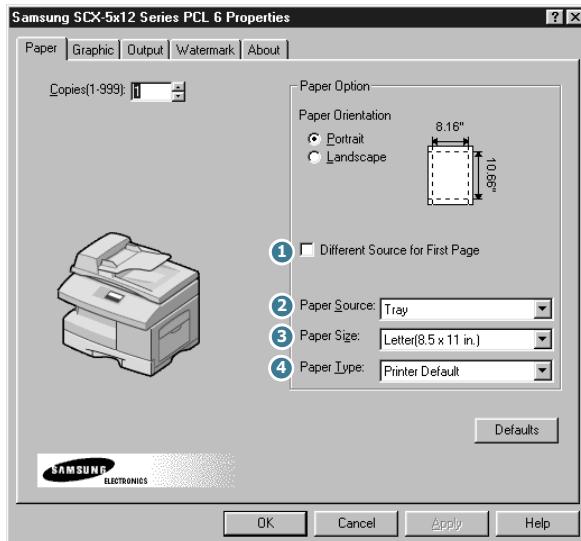
❶	Click on the box to put a check mark to use the different paper source for the first page. Select the desired paper source for the first page and other pages independently.	
❷	Select the desired paper source. Select **Cassette** if you load media in the paper cassette, **Bypass** if you load in the bypass tray.	
❸	Select the size of paper you are using.	
❹	Select the type of paper you are using.	
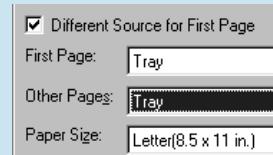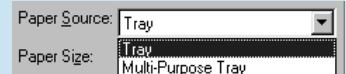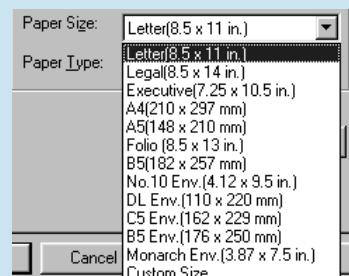
5
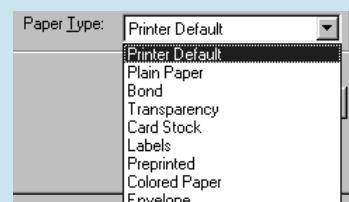
Graphic Tab

The **Graphic** tab allows you to adjust print quality for your specific printing needs.

❶	You can select the printing resolution. The higher setting, the sharpen the clarity of printed image. Higher settings may increase the time it takes to print a document.
❷	When you print with the resolution of 300, 600, 1200 dpi class, some printed characters or images can appear they have jagged or uneven edges. Set this Samsung Resolution enhancement Technology (SRT) option to improve the print quality of you text and image and make the characters and images appear smoother. • Printer Default - Choose this setting to use SRT that your printer provides. • Normal - Choose to disable SRT mode. • Text Enhance - Choose to refine the print quality of characters by smoothing out jagged edges that can occur on the angles and curves of each character. • Image Enhance - Choose to refine the print quality of photo image using SRT.
❸	With this option checked all text in your document will be printed in solid black. When it is not checked, colored text is printed in shades of gray.
❹	Toner Save Mode allows the printer to use less toner on each page. Using this mode will extend the life of your toner cartridge and reduce your cost per page, but will reduce print quality. Click to put a check mark to enable the mode.

Output Tab

The **Output** tab provides options for you to adjust how the document will appear on the printed page. The Output Mode Type options includes **Multiple Pages per Side**, **Booklet Printing**, **Fit to Page**, **Poster** and **Duplex printing**.

Multiple Pages per Side

Choose the **Multiple Pages per Side** option to print multiple pages on a single sheet of paper
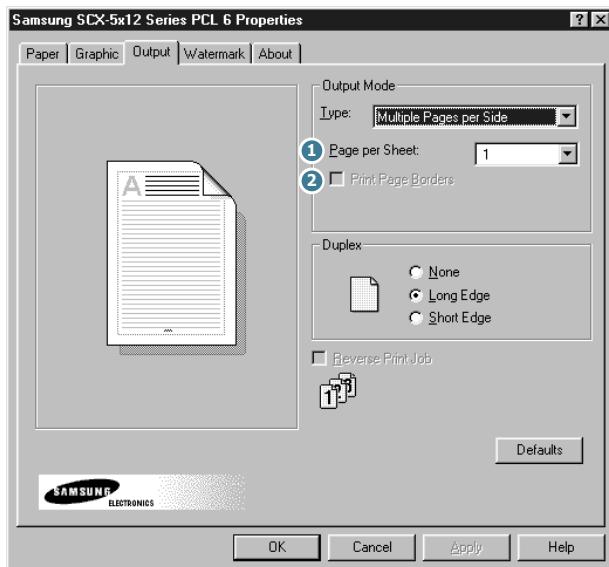
❶	Select the number of page you want to print per sheet (1,2,4,6,9 or 16) in the Pages per Sheet drop-down list.
❷	Click on the box to put a check mark to print a border around each page on the sheet.

Booklet Printing

The **Booklet Printing** option allows you to print a document out as a booklet.
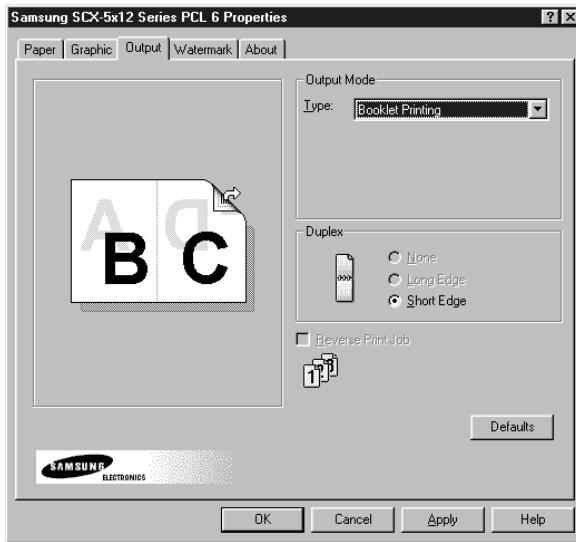
Once your document prints, fold the pages in half and staple the pages.
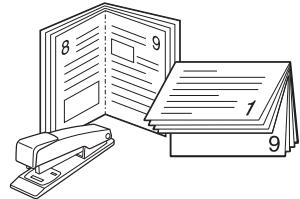
Fit to Page

Choose this option to scale your print job to any selected paper size regardless of the logical document size.
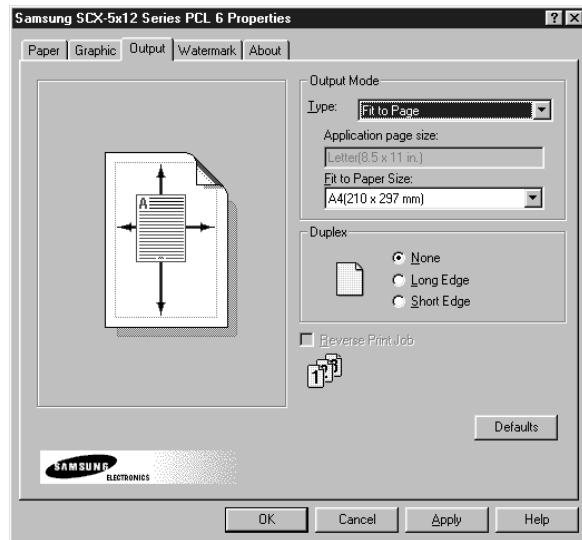
Poster

Choose the **Poster** option to enlarge the printed document.
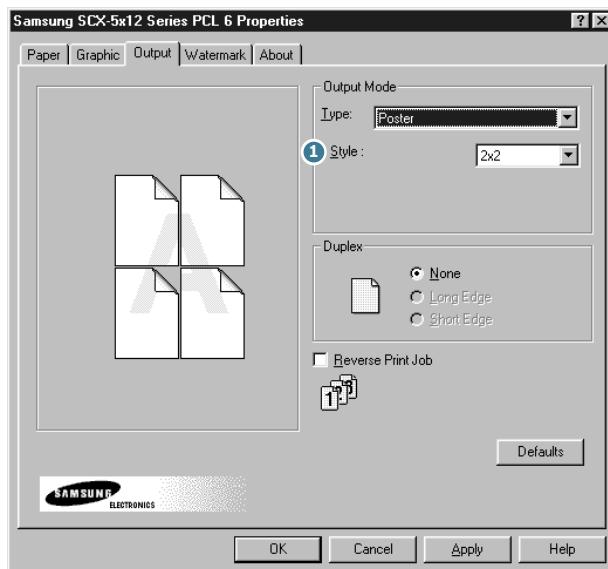
	To determine the scaling factor, select the style. You can choose from: **2x2**, **3x3**, or **4x4**.
1	For example, if you select **2x2**, the output will be automatically stretched to cover 4 physical pages.

5

Duplex Printing

Choose the **Duplex** option from the **Output** tab to print the document on both sides of the paper.
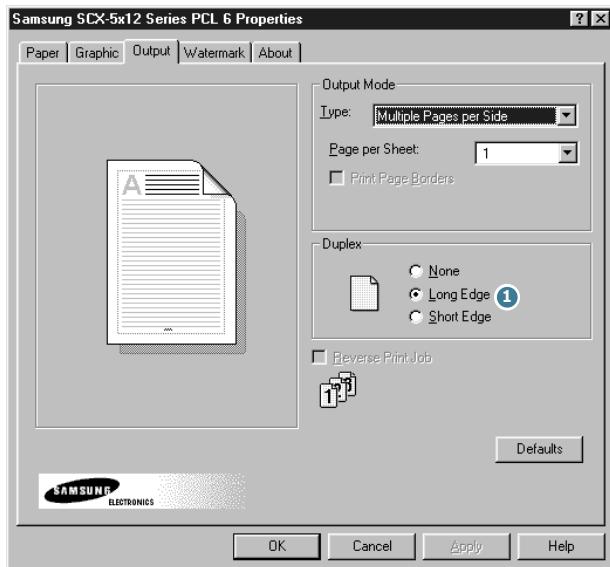
	Choosing **Long Edge** lets you have the binding orientation along the long edge of the paper as in a megazine.
❶	Choosing **Short Edge** lets you have the binding orientation along the short edge of the paper as in a calendar.

Watermartk Tab

The **Watermark** tab allows you to create a background image of text to print on each page of your document.

Watermarks are useful for printing identifying information on a document, information such as "DRAFT" or "CONFIDENTIAL", or perhaps the name of your company or department. By changing the watermark settings, you can create faint watermarks that are not intrusive to a document, or bold watermarks to call attention to specific information.
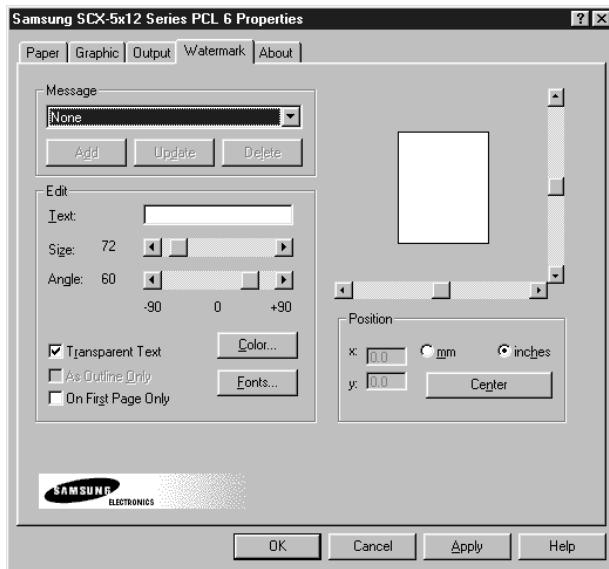
To create a watermark, enter the desired text message in the Text field, and select the desired watermark options. You can select the font type and size, color, position, and angle.

To add a new watermark to the list, click **Add**.

About Tab

The **About** tab gives you the program version number. If you click on the globe image on the window, you will be connected to the Samsung web site provided you are an internet user.

Printer Properties Buttons & Icons

- Click **OK** when done reviewing or making changes.
- Click **Cancel** if you want to exit the tab menus without applying any changes.
- Click **Help** to view the online Help feature and tab menu details.
- Click the **?** icon in the title bar. Position the **?** pointer over the parameter in question and click to see a pop-up window explaining that parameter.

6 SCANNING

Scanning with your product lets you turn pictures and text into digital files on your computer. Then you can fax or e-mail the files, display them on your web site, or use them to create projects that you can print out using Samsung SmarThru software which came with your product.

This chapter includes:

- **Scanning using the Samsung SmarThru**

- **Scanning Process with TWAIN-enabled Software**

Scanning using the Samsung SmarThru

SmarThru is the accompanying software for your product. With the SmarThru, scanning becomes a pleasure.

Take the following steps to start scanning using the SmarThru:

1 Feed the document(s) to be scanned **face up** into the ADF.

Or

Place a single document on the document glass **face down** then close the cover.

2 Once you installed Samsung software, you see the SmarThru icon on the desktop window. Double-click the SmarThru 3 icon.

Double click.
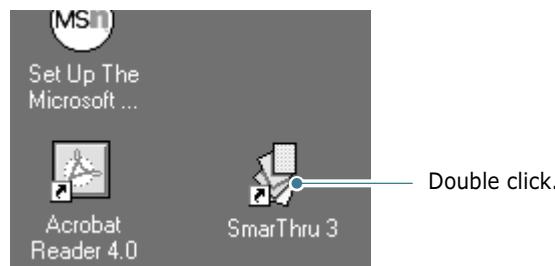
The SmarThru 3 window opens.
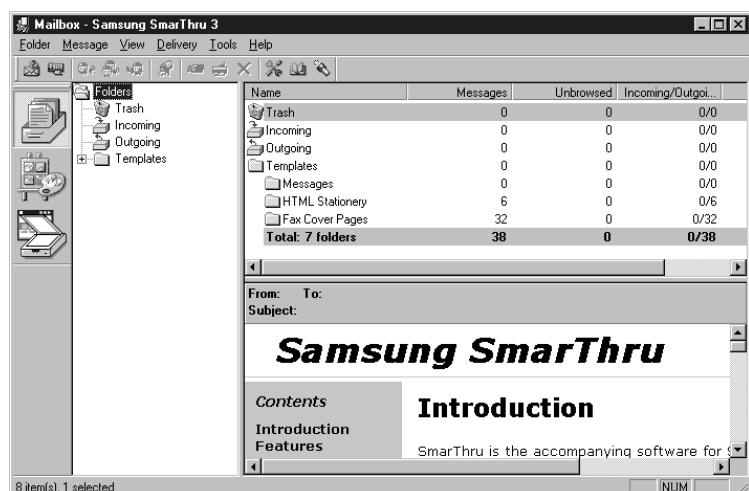
3 To open the Scan Wizard, click the Scan Wizard icon in the plugin bar on the left of the SmarThru 3 window.

Scan Wizard icon.

The Scan Wizard lets you use the following services:

•**Scan**

Lets you scan the original documents and save them in the Image Manager of the Samsung SmarThru system. The Image Manager is an image database manager and image editor program.

•**Copy**

Lets you use your product to produce professional quality copies. You can adjust the image size and make advanced settings.

•**Scan to Email**

Lets you scan the original document then launches a New Message form to send the just scanned image attached to a new mail. The email account must be configured in the Samsung SmarThru system to enable e-mail service.

•**Scan to FAX**

Lets you scan the original documents then launches a New Fax form which helps you send them as a fax image.

•**Scan to WEB**

Lets you scan the original documents for further publishing to the Web.

•**Scan to OCR**

Lets you scan the original documents and pass them to the OCR program. OCR (Optical Character Recognition) is the process of converting a scanned image into text that you can edit in a word processing program. After you scan your document, the software processes or "recognizes" it. Then you can edit it and either save the file or open it in any word processing program on your computer.

4 Click the desired service.

5 The Samsung Scan Manager for the selected service opens. Adjust the scan settings. You can use the **Help** button to get on-line help.
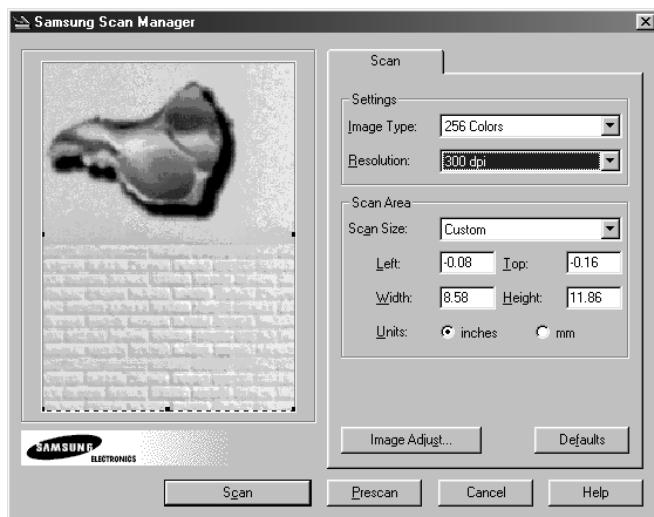
6 To start scanning, click **Scan**.

For further information, please refer to the SmarThru User's Guide which came with your product.

Scanning Process with TWAIN-enabled Software

If you want to scan documents using another software, you will have to use TWAIN-compliant software such as Adobe PhotoDeluxe or Adobe Photoshop. The first time you scan with your product, you will need to select it as your TWAIN source on the application you will use.

The basic scanning process involves a number of steps:
• Placing your photograph or page on the document glass.
• Opening an application (such as PhotoDeluxe or Photoshop).
• Opening the TWAIN window and setting scan options.
• Scanning and saving your scanned image.

You have to follow the program's instructions for acquiring an image. Please refer to the application User's Guide.

7 MAINTENANCE

This chapter provides information for maintaining the cartridge and your product.

This chapter includes:

- **Cleaning the Scan Unit**

- **Expected Cartridge Life**

- **Replacing the Toner Cartridge**

- **Setting to Notify Toner Low**
  (Available in SCX-5312F only)

- **Cleaning the Drum**

- **Replacing the Drum Cartridge**

- **Consumables and Replacement Parts**

Cleaning the Scan Unit

Keeping the scan unit clean helps ensure the best possible copies. We suggests that you clean the scan unit at the start of each day and during the day as needed.

CAUTION: Do not pour or spray water directly onto any part of the product. Do not use ammonia-based cleaner or volatile solvents such as thinner, on or around your product. They may damage the product.

---

1 Slightly dampen a soft lint-free cloth or paper towel with water.

2 Open the document cover.

3 Wipe the surface of the document glass and ADF glass until it is clean and dry.

White sheet

Document cover

ADF glass

Document Glass
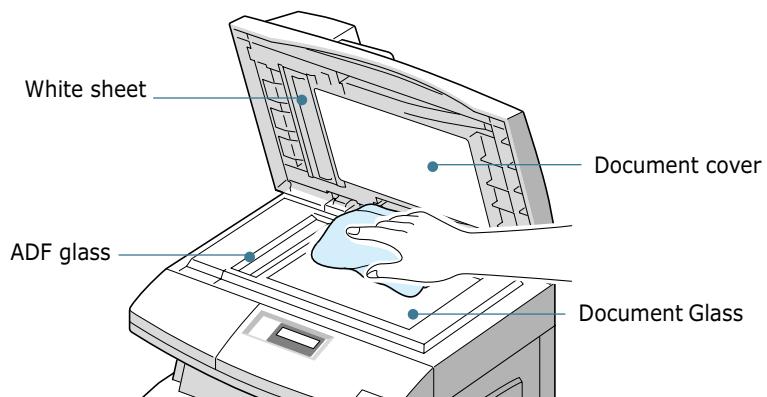
4 Wipe the underside of the white document cover and white sheet until it is clean and dry.

5 Close the document cover.

Expected Cartridge Life

The life of your toner cartridge depends on the amount of toner used in each print job. For instance, when you print a typical business letter with about 5% page coverage, you can expect a toner cartridge life of approximately 6,000 pages. The actual number may vary according to the print density of the page you print. If you print a lot of graphics, you may need to change the cartridge more often.

Replacing the Toner Cartridge

When the toner cartridge is near the end of its life, white streaks or hue change will occur. The LCD displays warning message "TONER LOW". You can temporarily re-establish the print quality by re-distributing the remaining toner in the cartridge.

1 Pull the release lever to open the side cover.
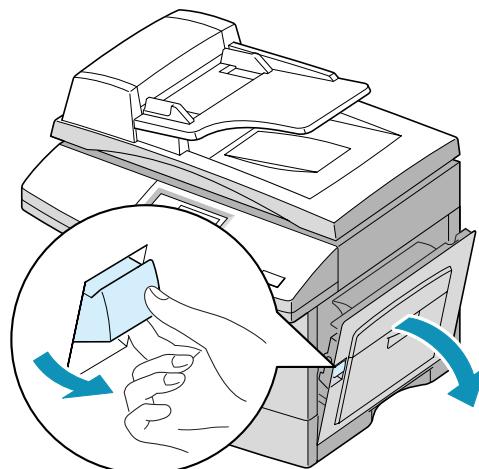
2 Open the front cover.
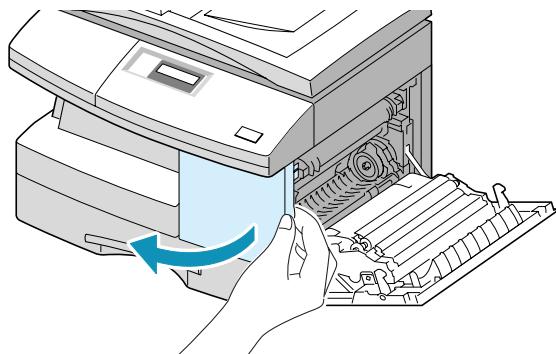
3 Turn the cartridge locking lever upwards to release the toner cartridge.
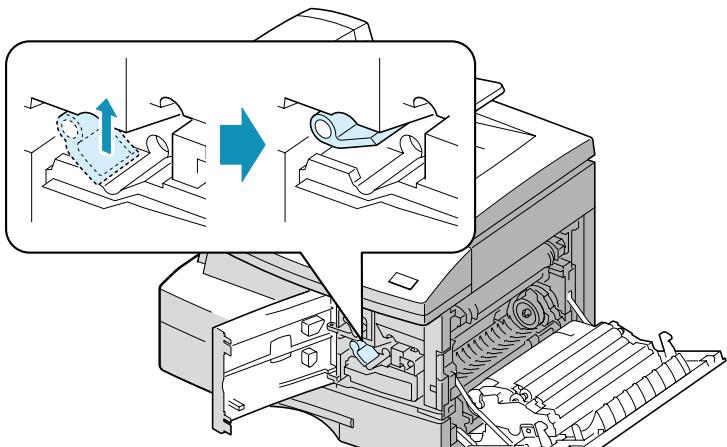
4 Pull the toner cartridge out and gently shake the cartridge to distribute the toner evenly inside the cartridge.
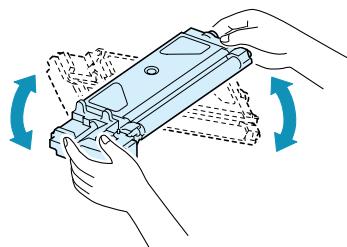
NOTE: If the toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

5 Reinstall the cartridge and turn the cartridge locking lever downwards.

6 Close the front cover, then the side cover. The display shows "NEW TONER? 1.YES 2.NO".

7 Select "NO" by pressing **2**. The product returns to Standby mode. This is typically successful one time only.

When the toner eventually runs out, only blank pages will print when a print job is sent, or when a fax is received. At this stage, the toner cartridge needs to be replaced. The display shows warning message "TONER EMPTY".

Take the following steps to replace the toner cartridge:

1 Open the side cover, then the front cover.

Make sure that the side cover must be open to open the front cover.

2 Turn the cartridge locking lever upwards to release the toner cartridge.
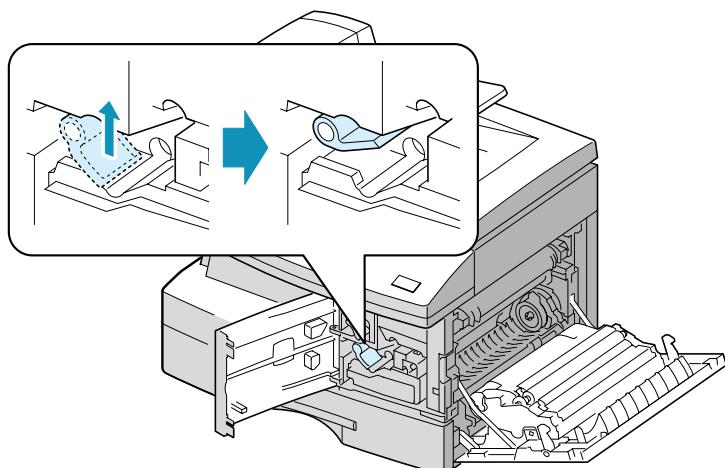
3 Pull the used cartridge out.
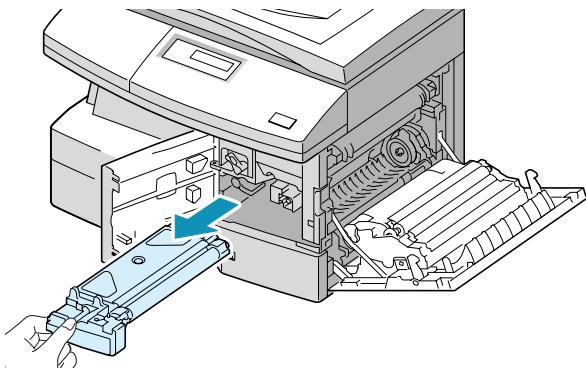
> ✓ **NOTE:** Help the environment by recycling your used toner cartridge. Refer to the recycling brochure packed with the toner cartridge for details.

4 Shake the new toner cartridge horizontally four or five times.

Save the box and the cover for shipping.

5 Slide the new toner cartridge in until it locks in place.

6 Turn the cartridge locking lever downwards until it locks in place.
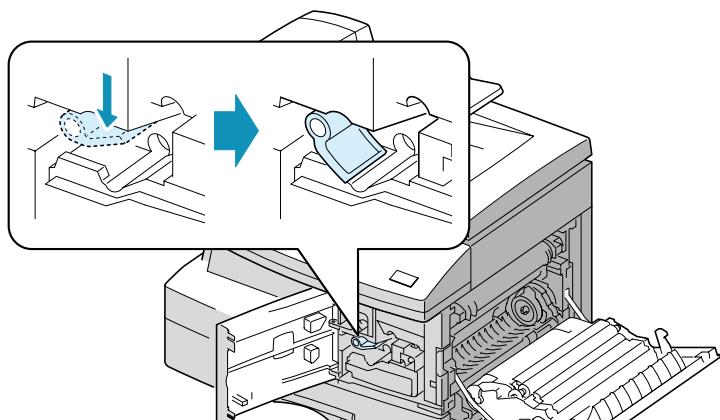
7 Close the front cover, then the side cover. The display shows "NEW TONER? 1.YES 2.NO".

8 Select "YES" by pressing **1**. The product returns to Standby mode.

Setting to Notify Toner Low

(Available in SCX-5312F only)

If you have set this NOTIFY TONER LOW menu option to "ON", when the toner cartridge needs to be replaced, your product automatically sends a fax to your service company or the dealer to notify them that your product requires a new toner cartridge.

1 Press **Menu/Exit** and then **Maintenance** from the one-touch dial keypad.

2 Use ∧ or ∨ until "NOTIFY TONER" appears on the bottom line of the display, and press **Mode/Enter**.

"NOTIFY TONER LOW" appears on the top line and the current setting appears on the bottom line.

3 Press < or > to change the setting. Select "ON" to enable this feature, then press **Mode/Enter**.

If you select "OFF", you can not use this feature.

4 Enter your fax number, then press **Mode/Enter**.

5 Enter your name (up to 20 digits), then press **Mode/Enter**.

6 Enter the service fax number to which your product sends the Notification fax message, then press **Mode/Enter**.

7 Enter the serial number of your product, then press **Mode/Enter**.

7

Cleaning the Drum

If you are getting streaks or spots on your print, you may set the product to clean the drum cartridge.

1 Before setting the cleaning procedure, make sure that paper is loaded in the product.

2 SCX-5312F users should press **Menu/Exit** then **Maintenance** from the one-touch dial keypad.

SCX-5112 users should press **Menu** then press ∧ or ∨ until "MAINTENANCE" appears on the top line.

3 "CLEAN DRUM" appears on the bottom line of the display. Press **Mode/Enter** (**Enter** on SCX-5112).

4 The product prints out a cleaning page. Toner particles on the drum surface are fixed to the paper. Repeat printing three or four times.

Replacing the Drum Cartridge

The useful life of the drum cartridge is approximately 15,000 copies. The LCD displays "DRUM WARNING" when the drum is near the end of life. Approximately 1,000 more copies can be made, but you should have a replacement cartridge in stock. When "DRUM EMPTY" is displayed, the product will stop operating until the drum cartridge is replaced.

To replace the drum cartridge:

1 Open the side cover, then the front cover.
Make sure that the side cover must be open to open the front cover.
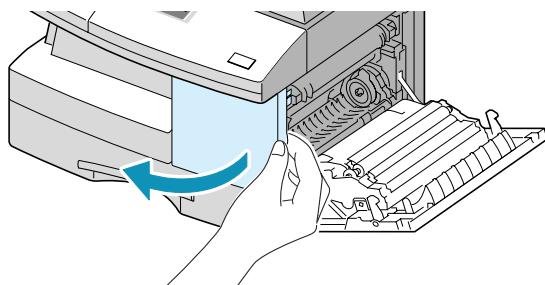
2 Turn the cartridge locking lever upwards to unlock the toner cartridge, then pull the toner cartridge out.
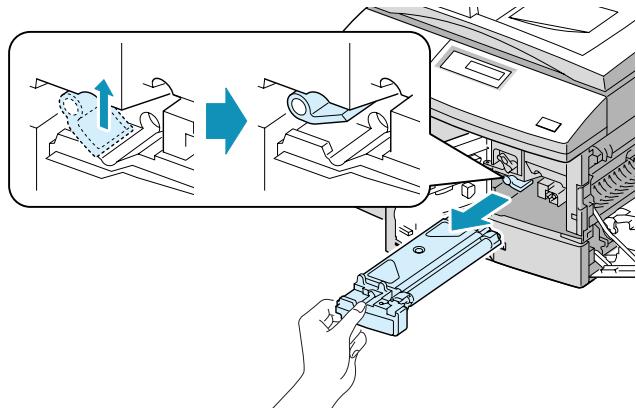
> **NOTE:** The toner cartridge must be removed to replace the drum cartridge.

3 Pull the used drum cartridge.
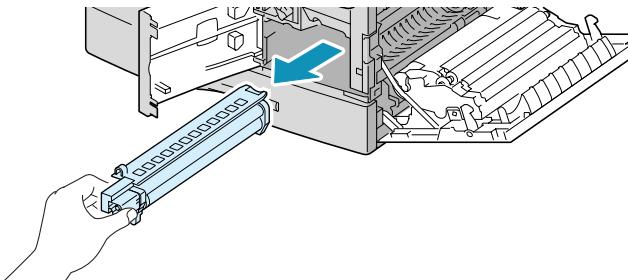
> **NOTE:** Help the environment by recycling your used drum cartridge. Refer to the recycling brochure packed with the drum cartridge for details.

4 Unpack the new drum cartridge and slide it in place, making sure not to touch the surface of the drum.
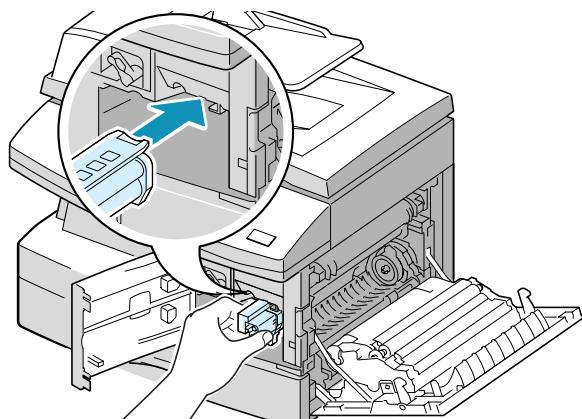
5 Reinstall the toner cartridge, then lock the lever.
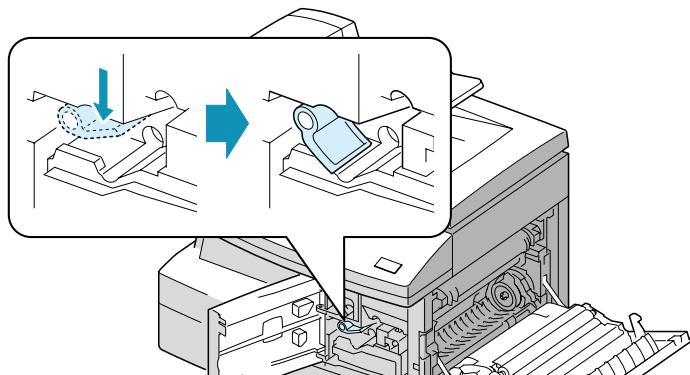
> **NOTE:** If your machine automatically recognises the replaced cartridge, you can skip following 6 and 7 steps.

6 Close the front cover and the side cover. The LCD displays "NEW DRUM? 1.YES 2.NO".

7 Select "YES" by pressing **1**. The product returns to Standby mode.

If the drum cartridge does not work properly and it is required to replace with a new one before "DRUM WARNING" or "DRUM EMPTY" appears on the display, replace the drum cartridge as described above then take the following steps to reset the drum counter:

1 Press **Menu/Exit** then **Maintenance** from the one-touch dial keypad.

SCX-5112 users should press **Menu** then press ∧ or ∨ until "MAINTENANCE" appears on the top line.

2 Use ∧ or ∨ until "NEW DRUM" appears on the bottom line of the display, and press **Mode/Enter** (**Enter** on SCX-5112).

3 "NEW DRUM UNIT?" appears on the top line and "1.YES 2.NO" appears on the bottom line. Press **1** to select "1.YES."

> **NOTE:** If you do not reset the counter, "DRUM WARNING" or "DRUM ENPTY" may appear before the time is up.

Consumables and Replacement Parts

From time to time, you will need to replace the toner and drum cartridges, roller, and fuser unit to mainatin top performance and avoid print quality problems and paper feed problems resulting from worn parts.

The following items should be replaced after you have printed a specified number of pages. See the table below.

Items	Yield(Average)
ADF Rubber Pad	20,000
ADF Roller	50,000
Paper Feeding Roller	75,000
Transfer Roller	75,000
Fuser Unit	75,000

The purchase the consumables and replacement parts, contact Samsung dealer or the place where you bought your product. We strongly recommed that items (expect for the print cartridge) be installed by a trained servicer.

NOTE

8 TROUBLESHOOTING

This chapter gives helpful information for what to do if you encounter an error.

This chapter includes:

- **Document Jams**

- **Paper Jams**

- **LCD Error Messages**

- **Solving Problems**

Document Jams

If a document jams while it is feeding through the ADF, "DOCUMENT JAM" appears in the display.

Details for clearing the three types of document misfeeds are given below.

Input Misfeed

1 Open the ADF top cover.
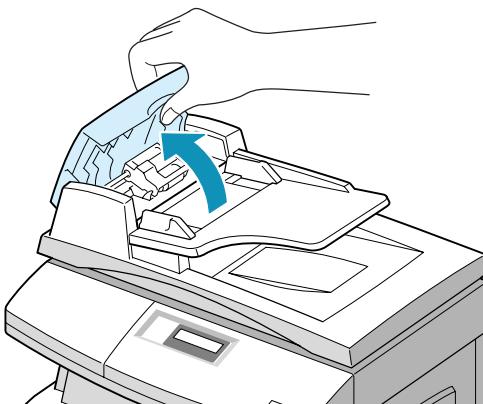
2 Pull the document gently to the right and out of the ADF.
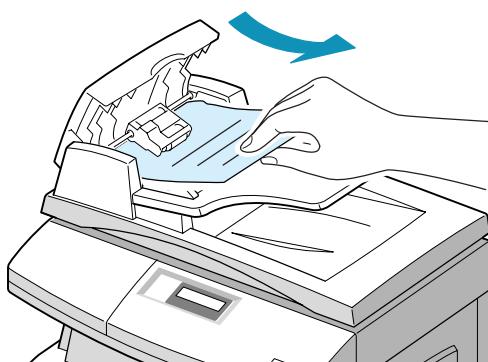
3 Close the ADF top cover. Then feed the documents back into the ADF.

NOTE: To prevent document jams, use the document glass for the thick, thin or mixed documents.

Exit Misfeed

1 Open the document cover and turn the release knob to remove the misfeed documents from the exit area.
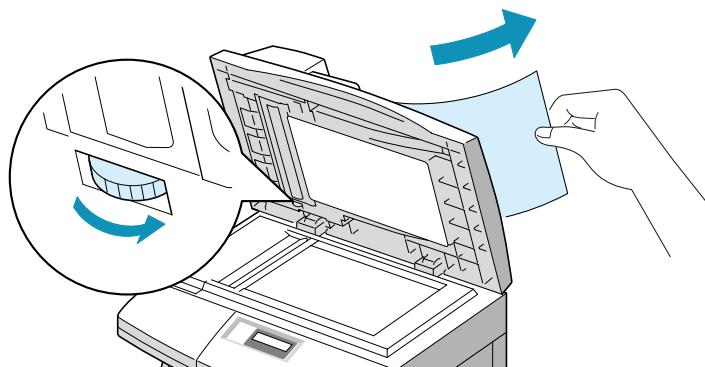
2 Close the document cover. Then feed the documents back into the ADF.

Roller Misfeed

1 Open the document cover.

2 Turn the release knob so that you can easily seize the misfed document, and remove the document from the ADF or the feed area by carefully pulling it rightwards using both hands.

3 Close the document cover. Then feed the documents back into the ADF.

8
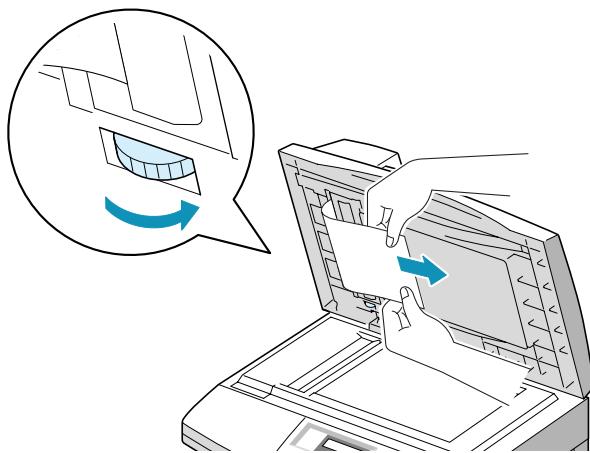
Paper Jams

If paper jams occur, "PAPER JAM" appears in the display. Follow the steps below to clear jam. To avoid tearing paper, pull the jammed paper out gently and slowly.

Paper Feed Area

If jammed in the paper feed area, "PAPER JAM0" appears in the display.

1 Remove the paper cassette. After you pull it out completely, lift the front part of the cassette slightly up to release the cassette from the product.
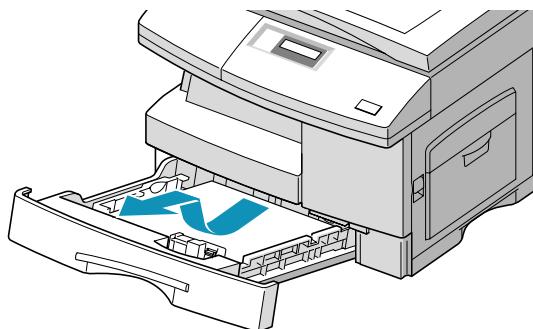
2 Remove the jammed paper by gently pulling it straight out.
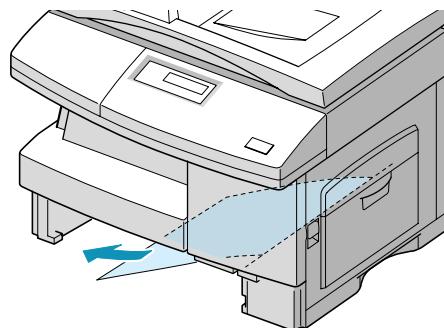
If you remove the jammed paper here, open the side cover then close it to clear "PAPER JAM" message on the display.

If there is any resistance, and the paper does not move immediately when you pull, stop pulling. Then:

3 Pull the release lever to open the side cover.

NOTE: Do not touch the shiny drum cartridge surface. Scratches or smudges will result in poor copy quality.
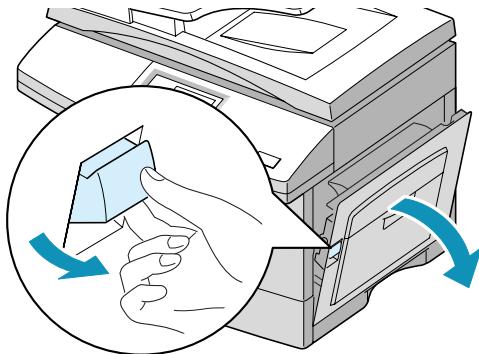
4 Carefully remove the misfeed paper in the direction shown.
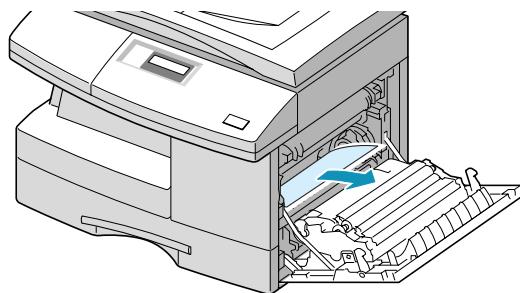
5 Close the cover and insert the paper cassette. Lower the rear part of the cassette to align the rear edge to the corresponding slot of the machine, then insert it completely.
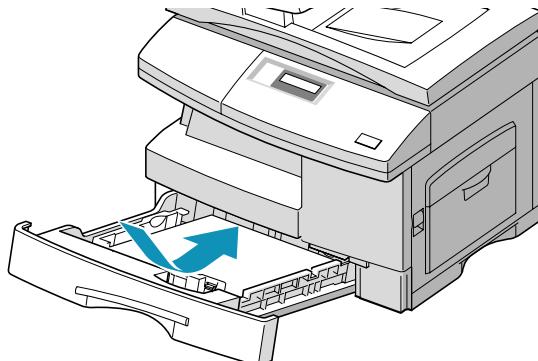
Fuser Area

If jammed in the fuser area, "PAPER JAM 1" appears in the display.

> **NOTE:** The fuser area is hot. Take care when removing paper from the product.

1 Press the release lever to open the side cover.

2 Pull down on the fuser lever as shown below.
This will release pressure on the paper.

If paper is not seen in this area, skip to the Exit Area.
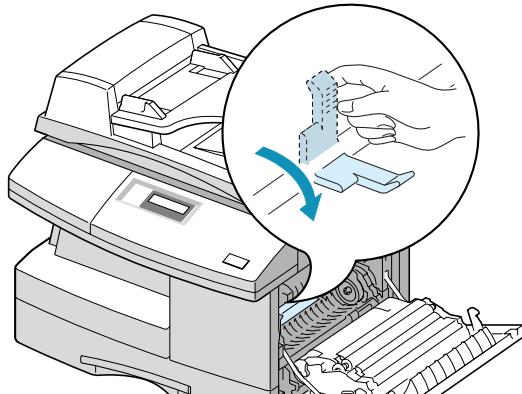
> **NOTE:** Do not pull paper up through the fusing unit. Unfused toner may adhere in the area, resulting in smudged copies.

3 Remove the jammed paper, in the direction shown.
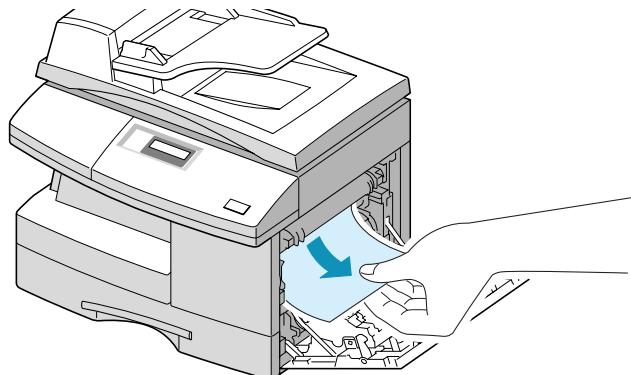
4 Push up on the fuser lever, then close the side cover.
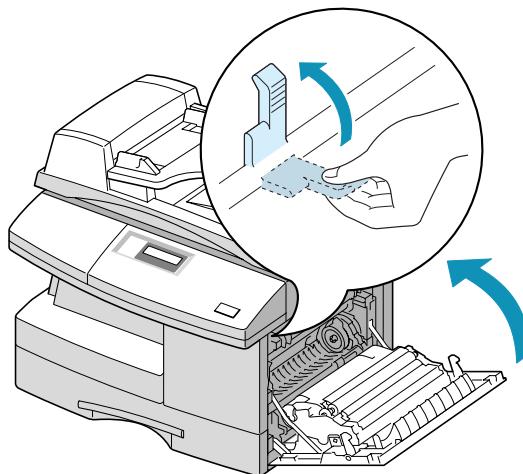
Paper Exit Area

If jammed in the paper exit area, "PAPER JAM 2" appears in the display.

1 Press the release lever to open the side cover.

2 Open the front cover.

8
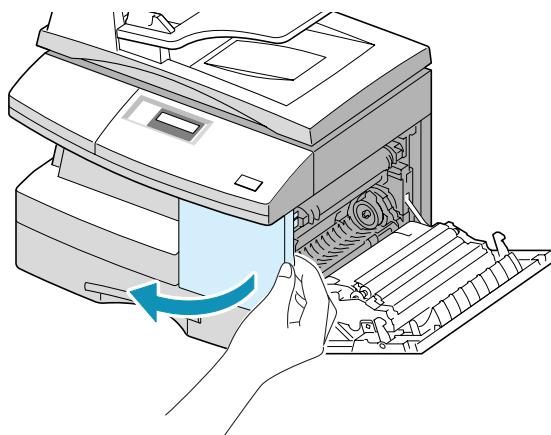
3 Pull down on the fuser lever. This will release pressure on the paper.
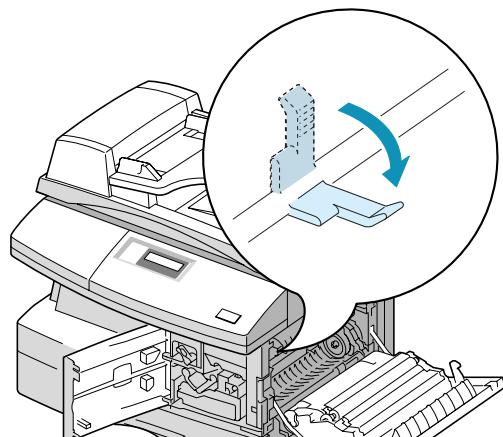
4 Turn the jam remove lever in the direction of the arrow to move the paper to the exit area, then gently pull the paper out through the exit area.
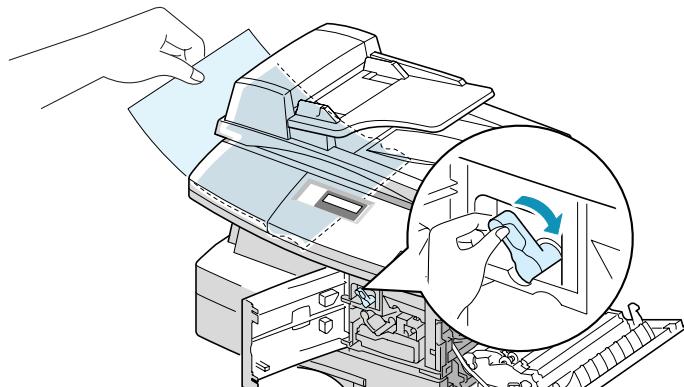
5 Push up on the fuser lever.
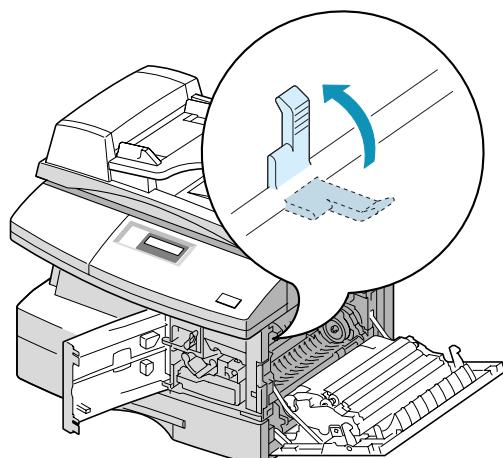
6 Turn the jam remove lever back to the original position.
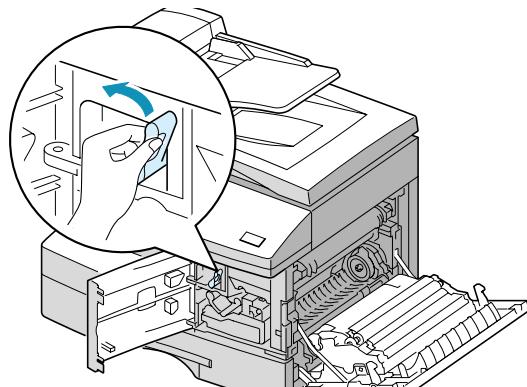
7 Close the front cover ❶ and the side cover ❷ .
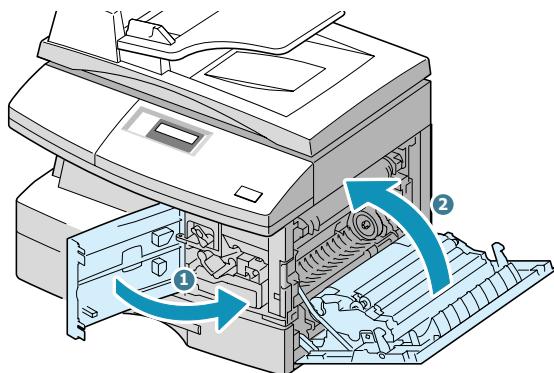
Duplex Jam

If paper jam occurs in the duplexer, "DUPLEX JAM" appears in the display.

1 Press the release lever to open the side cover.

2 Remove the jammed paper. Then close the side cover.

8

Bypass Jam

"BYPASS JAM" appears in the display when the machine does not detect paper in the bypass tray due to no paper or improper paper loading when you try to print using the bypass tray.

"BYPASS JAM" also may occur when the paper is not properly fed into the machine through the bypass tray. In that case, pull the paper out of the product.
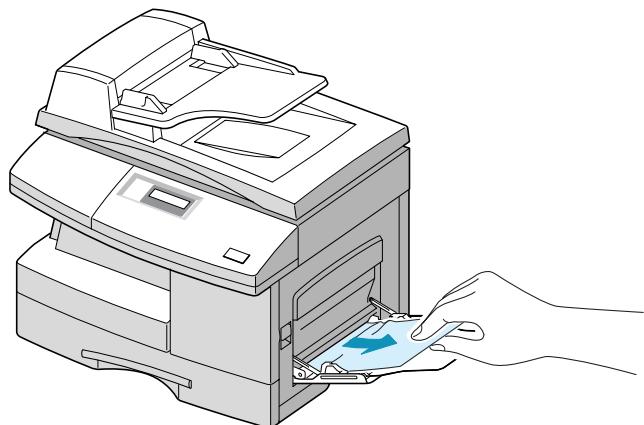
LCD Error Messages

Display	Meaning	Solution
BYPASS JAM	The product detects non feeding from the bypass tray.	Load paper in the bypass tray.
DOCUMENT JAM	The loaded document has jammed in the ADF.	Clear the document jam. See page 8.2.
DOOR OPEN	The side cover is not securely latched.	Close the side cover until it locks in place.
DRUM WARNING	The drum cartridge is near the end of life.	You should have a replacement cartridge in stock.
DUPLEX JAM	Paper has jammed in the middle of 2-sided printing.	Clear the jam. See page 8.9.
DRUM EMPTY	The drum cartridge is out of life.	Replace the drum cartridge. See page 7.8.
FUSER ERROR	There is a problem in the fuser unit.	Unplug the power cord and plug it back in. If the problem still persists, please call for service.
OPEN HEAT ERROR		
HEATTING ERROR		
OVER HEAT		
INVALID CARTRIDGE	You have used unauthorised cartridge.	You must use a Samsung-approved cartridge.
LINE ERROR (for SCX-5312F only)	Your product cannot connect with the remote machine, or has lost contact because of a problem on the phone line.	Try again. If failure persists, wait an hour or so for the line to clear, then try again. Or, turn the ECM mode on. See 'System Data Options' in the Facsimile User's Guide.
LSU ERROR	A problem has occurred in the LSU (Laser Scanning Unit).	Unplug the power cord and plug it back in. If the problem still persists, please call for service.

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Display	Meaning	Solution
MEMORY FULL (for SCX-5312F only)	The memory is full.	Either delete unnecessary documents, or retransmit after more memory becomes available, or split the transmission into more than one operation.
NO ANSWER (for SCX-5312F only)	The remote fax mahine has not answered after all the redial attempts.	Try again. Make sure the remote machine is operational.
POLLING ERROR (for SCX-5312F only)	The remote fax machine you want to poll is not ready to respond to your poll. Or, when setting up to poll another fax mahine, you have used an incorrect poll code.	The remote operator should know in advance that you are polling and have their fax machine loaded with the orginal document. Enter the correct poll code.
NO DEVELOPER CARTRIDGE	The drum cartridge is not installed.	Install the drum cartridge.
NO PAPER	The paper in the paper cassette has run out.	Load the paper in the paper cassette.
RX TRAY FULL	Paper is overstacked in the output bin.	Remove paper.
PAPER JAM 0	Paper has jammed in the paper feeding area of the cassette.	Clear the jam. See page 8.4.
PAPER JAM 1	Paper has jammed in the fuser area.	Clear the jam. See page 8.6.
PAPER JAM 2	Paper has jammed in the paper exit area.	Clear the jam. See page 8.7.
RETRY REDIAL? (for SCX-5312F only)	The product is waiting for a specified time interval to redial a previously busy station.	You can press **Mode/Enter** to immediately redial, or **Stop/Clear** to cancel the redial operation.
SCANNER LOCKED	The scan module is locked.	Unlock the scanner (see page 1.2) and press **Stop/Clear**.

Display	Meaning	Solution
TONER EMPTY	The toner cartridge has run out. The product stops.	Replace with a new toner cartridge. See page 7.3.
TONER LOW	The toner is almost empty.	Take out the toner cartridge and gently shake it. By doing this, you can temporarily re-establish printing operations.

Solving Problems

The following chart lists some conditions that may occur and the recommended solutions. Follow the suggested solutions until the problem is corrected. If the problem persists, please call for service.

Copier Problem Solution Chart

Condition	Suggested solutions
The LCD does not turn on.	Check that the product is plugged into an electrical receptacle. Ensure that there is power to the receptacle and that the product power switch is in the ON position.
The product beeps an error sound and does not make a copy.	Make sure that the product is in the Copy mode. If not, chagne the mode into the Copy mode by pressing **Mode/Enter**.
Copies are too light or too dark.	If the original is light, use the **Contrast** button to darken the background of the copies. If the original is dark, use the **Contrast** button to lighten the background of the copies.
Smears, lines, marks, or spots on copies.	If detects are on the original, press the **Contrast** button to lighten the background of your copies. If no defects are on the original, clean the document glass and underside of the document cover.

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Condition	Suggested solutions
Copy image is skewed.	Ensure that original is positioned correctly on document glass. Check that copy paper is loaded correctly.
Blank copies.	Ensure that the original is face down on the document glass or face up in the ADF.
Image rubs off the copy easily.	Replace the paper in the cassette with paper from a new package. In high humidity areas do not leave paper in the product for extended periods of time.
Frequent copy paper jams.	Fan the stack of paper, then turn it over in the cassette. Replace paper in paper cassette with a fresh supply. Check/adjust paper guides. Ensure that the paper is the proper paper weight. 20 lb (75 g/m^2) bond paper is recommended. Check for copy paper or pieces of copy paper remaining in the product after a paper jam has been cleared.
Toner yield is lower than expected and TONER LOW message appears in the LCD.	Toner may be lodged in the cartridge. Remove the toner cartridge. Shake the toner cartridge and tap along the top of the toner cartridge over a waste receptacle. Take care not to touch the exposed toner on the left side of the cartridge.
Fewer copies from the toner cartridge than expected.	Originals contain pictures, solids, or heavy lines. Originals are forms, newsletters, books etc. The product is being turned on and off frequently. The document cover is being left open while copies are being made.
The following message appears on the computer screen: Scanner is busy receiving or printing data. When the current job is completed, try again.	There may be a copying or printing job in progress. When the current job is completed, try the job again.

Printing Problem Solution Chart

Condition	Probable cause	Suggested solutions
Your product does not print.	The IEEE-1284 parallel cable or USB cable is not connected properly..	Check the cable connection..
	The IEEE-1284 parallel cable or USB cable is defective.	Check the cable with a computer and printer that work. If printing is still not possible, replace the cable.
	The port setting is incorrect.	Check the printer settings in the Windows Control Panel to make sure that the print job is being sent to the correct port. (For Example: LPT1.)
Your product does not print. (continued)	The toner and drum cartridges are not installed properly.	Check that the toner and drum cartridges are installed properly.
	The printer driver may not be installed properly.	Reinstall the software.
	The parallel port cable specifications may not be correct.	Use the IEEE-1284 parallel port cable supplied with the machine or replace it with an IEEE-1284 compliant cable.
Half of the page is blank.	The page layout is too complex.	Reduce the resolution setting from 600 dpi to 300 dpi. Install more RAM in the computer.
	The page orientation may be incorrect.	Change the page orientation in the printer setup dialogue.

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Condition	Probable cause	Suggested solutions
When printing using the USB connection, an error occurs repeatedly.	When the USB mode is set to "FAST" some PC users may experience poor USB communication.	Change the USB mode to "SLOW." To do so, take the following steps: 1. Press **Menu/Exit** then **System Setup** from the one-touch dial keypad. SCX-5112 users should press **Menu** then **Enter**. 2. Use ∧ or ∨ until "USB MODE" appears on the top line of the display. The current setting appears on the bottom line. 3. Press ＜ or ＞ to select "SLOW." 4. Press **Mode/Enter** (**Enter** on SCX-5112) to save the selection. 5. Press **Stop/Clear** to return to Standby mode.
Printing is too slow.	The computer parallel port may not be set for high speed communications.	If your computer is equipped with an ECP parallel port, enable this mode of operation. Refer to the Enabling High Speed Printer Communications section and your PC's user guide.
	If using Windows 95, the spool setting may be set incorrectly.	Point to the **Start** and then click **Settings** then **Printers**. Click your product icon with the right mouse button. Click **Properties** and then spool settings on the **Details** tab. Select the desired setting from the available choices.
	Computer may not have enough memory (RAM).	Install more RAM in your computer.
	The print job is large.	Reduce resolution from 600 dpi to 300 dpi.

Condition	Probable cause	Suggested solutions
Irregular faded patches of print.	There is a paper quality problem.	Use only paper that meets the specifications required by the product.
	Toner may be unevenly distributed.	Remove the toner cartridge and shake it gently to evenly distribute the toner. Then reinstall the toner cartridge.
Black staining	There is a paper quality problem.	Use only paper that meets the specifications required by your product.
Character voids	The paper may be too dry.	Try printing with a different batch of paper.
Background scatter	The paper may be too damp.	Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture from the air.
	Printing over uneven surfaces.	If printing onto envelopes, change your printing layout to avoid printing over areas that have overlapping seams on the reverse side.
Missing characters	The paper may be too damp.	Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture from the air.
Back of printout is dirty	The transfer roller may be dirty.	Print a few blank pages to clean the transfer roller.
Faded graphics	Toner may be low.	Remove the toner cartridge and shake it gently to evenly distribute the toner. Then reinstall the toner cartridge. Ensure that you have a spare toner cartridge.

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Fax Problem Solution Chart

(Available in SCX-5312F only)

Condition	Suggested solutions
The product is not working, there is no display and the buttons are not working.	Unplug the power cord and plug it in again. Check that your socket is active.
No dial tone	Check that the phone line is connected properly. Check that the phone socket in the wall by plugging in another phone.
The numbers stored in the memory do not dial correctly.	Make sure that the numbers are stored in the memory correctly. Print a Phone Book list referring to the Facsimile User's Guide.
The document does not feed into the product.	Make sure that the document is not wrinkled and you are putting it in correctly. Check the document is the right size, not too thick or thin. Make sure that the ADF top cover is firmly closed.
You cannot receive faxes automatically.	The FAX mode should be selected. Is there paper in the cassette? Check if the display shows "MEMORY FULL".
Your product cannot receive faxes manually.	Did you hang up the handset of the external telephone before you start faxing?
Your product will not send anything.	Make sure that the document is loaded face down. "TX" should show up on the display. Check the other fax machine you are sending to, to see if it can receive your fax.
You cannot poll another machine.	The fax machine you are polling may be using a poll code. Contact the remote opeator.

Condition	Suggested solutions
The incoming fax has blank spaces or you received a poor-quality copy.	The fax machine sending you the fax may be faulty. The fax machine sending you a fax may have a dirty document glass. Clean the document glass, referring to page 7.2. A noisy phone line can cause line errors. Check your machine by making a copy. The toner cartridge may be empty. Replace the toner cartridge, referring to page 7.3.
Are some of the words on the incoming fax stretched?	The fax machine sending you the fax had a temporary document jam.
There are lines on the copies or documents you send.	Check your scan glass for marks, and clean it. See page 7.2.
The product dials a number, but fails to make a connection with another fax machine.	The other fax machine may be turned off, out of paper, or cannot answer incoming calls. Speak with the other machine operator and ask them to sort out the problem.
You cannot store a document in the memory.	There may not be enough memory to store the document. If the display shows a 'MEMORY FULL' message, delete any documents you no longer need from the memory, then restore the document.
Blank areas appear at the bottom of each page or on other pages, with only a small strip of text printed at the top.	You may have chosen the wrong paper settings in the user option setting. Refer to the Facsimile User's Guide to choose a proper paper size.

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NOTE

9 APPENDIX

This chapter includes:

- **General Specifications**

- **Scanner and Copy Specifications**

- **Printer Specifications**

- **Facsimile Specifications** *(SCX-5312F only)*

General Specifications

Item	Description		
Printing method	Laser scanning unit		
Scanning method	Sheet-fed and Flat-bed CCD(charge coupled device) module		
Effective scanning width	8.2 inches (208 mm)		
ADF Document size	Width	6.9 to 8.5 inches (174 to 216 mm)	
	Length	Single page: 5 to 59 inches (128 to 1500 mm)	
		Multi pages: 5 to 14 inches (128 to 356 mm)	
Recording paper type	for Cassette : Letter, A4, Legal (weight: 60~90 g/m^2, 16 ~ 24 lb)		
	for By pass Tray: Letter, Legal, JIS B5, A4, Executive, A5, A6 card, Post Card 4x6, HagaKi, Envelope 7-3/4, Envelope COM-10, Envolope DL, Envelope C5 * Min.: 3.9 x 5.8 inches (98 x 148 mm), (weight: 60~120 g/m^2, 16 ~ 32 lb)		
Recording paper capacity	for Cassette : 550 sheets (weight: 75 g/m^2, 20 lb) for By pass Tray: 100 sheets (weight: 75 g/m^2, 20 lb)		
Automatic document feeder	Up to 30 pages (20 lb or 75 g/m^2)		
Consumables	2-piece Toner/Drum cartridge system		
Compatibility	Win 95, 98, 2000, NT 4.0, Win-Me, Win XP		
PC Interface	IEEE 1284 Parallel, USB		
Power requirements	100 ~ 127 VAC, 50/60 Hz, 4A 220 ~ 240 VAC, 50/60 Hz, 2.5A		
Power consumption	Sleep mode: 35 W Standby mode: 90 W Average: 320 W		
Operating conditions	Temperature: 50 ^{o}F to 89 ^{o}F (10 ^{o}C to 32 ^{o}C) Humidity: 20% to 80% RH		

LCD	16 Characters x 2 lines
Toner cartridge life	6,000 sheets @ 5% coverage (A4, Basic data)
Drum cartridge life	15,000 sheets @ 5% coverage (A4, Basic data)
SET Dimension (WxDxH)	22.0 x 17.0 x 18.1 inches (560 x 433 x 459 mm)
Weight	Net: 22.5 Kg (including consumables) Gross: 26.5 Kg (including consumables, accessories and package)
Package Weight	Paper: 2.7 Kg Plastic: 0.7 Kg

Scanner and Copy Specifications

Item	Description
Compatibility	TWAIN standard
Resolution	Optical 600 dpi resolution (Mono and Color)
Color bit depth	Internal: 32 bit External: 24 bit
Mono bit depth	1 bit for text mode 8 bit for Gray mode
Copy speed	12 copies per minute
Copy resolution	1,200 dpi enhanced
Zoom Rate	by platen 25 ~ 400 % by ADF 25 ~ 100 %

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Printer Specifications

Item	Description
Printing method	Laser Scanning Unit
Printing speed	12 pages per minute/A4
Print resolution	1200 dpi class
Emulation language	PCL 6

Facsimile Specifications

(SCX-5312F only)

Item	Description
Compatibility	ITU-T Group 3, ECM
Applicable line	Public Switched Telephone Network(PSTN) or behind PABX
Data coding	MH/MR/MMR (ECM Mode) and JPEG for color fax transmission
Modem speed	33600/28800/21600/19200/14400/12000/9600/7200/4800/2400 bps with fall back
Transmission speed	Approx. 3 seconds/page * Transmission time applies to memory transmission of text data with ECM compression using only ITU-T No.1 Chart.
Scanning speed	Platen: approx. 3 seconds/letter (at standard fax resolution mode) ADF: approx. 5 seconds/letter (at standard fax resolution mode)
Resolution	Standard(203x98 dpi), Fine(203x196 dpi), Superfine(300x300 dpi), Photo(203x196 dpi/300x300 dpi), Color(203x196 dpi)
User Memory	4 MB (320 pages)
Halftone	256 levels
Auto dialer	One-touch dialling (registration for 40 numbers) Speed dialling (registration for 80 numbers)

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